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THE IMPACT OF PL 89-10 TITLE I ACTIVITIES ON THE READING COMPETENCE OF ELEMENTARY AND SECONDARY SCHOOL LEARNERS. FINAL REPORT.
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DESCRIPTORS- *LINGUISTIC PATTERNS, *STRUCTURAL ANALYSIS, *READING COMPREHENSION, *BEGINNING READING, *WORD RECOGNITION, READING SKILLS, SILENT READING, WORD STUDY SKILLS, SYNTAX, MORPHEMES, GRAPHEMES, PHONEMICS, INTONATION, SPEECH,

MUCH OF LANGUAGE ARTS TEACHING IS BASED ON THE ASSUMPTION THAT WORDS ARE NATURAL UNITS OF LANGUAGE AND THAT PRINTED WORDS HAVE ONE-TO-ONE CORRESPONDENCES WITH WORDS IN SPEECH. THE OUTCOME OF THIS ASSUMPTION IS TO EMPHASIZE THE DEVELOPMENT OF THE CHILD'S SIGHT VOCABULARY AND WORD PERCEPTION, ESPECIALLY IN RELATION TO THE TEACHING OF READING. INSTEAD OF REGARDING WORDS AND MORPHEMES AS USEFUL CONSTRUCTS FOR DIVIDING LONGER UNITS OF LANGUAGE INTO SEGMENTAL UNITS, THESE LONGER UNITS ARE CONSIDERED ACCUMULATIONS OF WORDS OR MORPHEMES. EDUCATED PEOPLE USUALLY IMPOSE THE CHARACTERISTICS OF WRITTEN WORDS ON ORAL LANGUAGE, FORGETTING THAT PHONEMIC, MORPHEMIC, SYNTACTICAL, GRAPHEMIC, AND MORPHOLOGICAL STRUCTURES DO NOT HAVE PERFECT CORRESPONDENCE AMONG THEM. THE WORD IS A UNIT OF WRITTEN SYMBOLISM, BUT CHILDREN SPEAK IN LANGUAGE. A LIST OF FIVE WORDS IS NOT COMARABLE TO A FIVE-WORD SENTENCE. LESS WORD-CENTEREDNESS IN READING MATERIALS AND READING INSTRUCTION SHOULD BE ATTEMPTED, AND CHILDREN SHOULD BE HELPED TO SEE PHRASES AS SUBDIVISIONS OF SENTENCES. THIS PAPER WAS PRESENTED AT THE INTERNATIONAL READING ASSOCIATION CONFERENCE (BOSTON, APRIL 24-27, 1968). (WL)

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FINAL REPORT
Project No. OE 6-99-162

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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THE IMPACT OF PL 80-10 TITLE I ACTIVITIES ON THE READING COMPETENCE OF ELEMENTARY AND SECONDARY SCHOOL LEARNERS

May 1968

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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The Impact of PL 89-10 Title I Activities on the Reading Competence of Elementary and Secondary School Learners

Project No. OE 6-99-162
Contract No. OE 6-99-162

Robert J. Graham

May 1968

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

The Pennsylvania State University

University Park, Penna.

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The cooperation of state and local education officials, teachers, and students in the local schools was exceptional throughout.

My sincere thanks to all who provided time and energy for this task.

R.J.G.

COOPERATING SCHOOL DISTRICTS AND THEIR ADMINISTRATIVE OFFICERS

State and School District	Phase of Participation
MARYLAND	
Brunswick and Burkittsville Lee Smith, Principal	I and II
Frederick Donald McLuckie, Principal	I and II
Oakland Lewis Domenick, Project Director, Title I	II
OHIO	
Bellaire John Yoder, Title I Coordinator Wanda Ruminski, Title I Guidance Counsellor	II
Cambridge Mr. Everett, Title I Coordinator	II
Coshocton Ronald S. Cramblett, Coordinator of Instruction	II
Northwest Local, McDermott Berl G. Haney, Superintendent Fay McClay, Librarian and Title I Coordinator	II
Piketon Max W. Way, Project Director, Title I	II

State and School District	Phase of Participation
PENNSYLVANIA	
Altoona Thomas Hyslop, Superintendent Ardell Feeley, Asst. Superintendent	I and II
Chestnut Ridge Elwood Varner, Project Director Mr. Brough, Title I Guidance	I and II
Cheltenham Ross M. Gill, Superintendent Katherine Geary, Elementary Educ. Coordinator Barbara Bass, Title I Coordinator	I
Cresson F. K. Shields, Superintendent Mrs. Shields (St. Francis College), Title I Consultant	I
Cumberland Valley Thomas Clugston, Superintendent Harriet Brennerman, Coordinator	I
Edwardsville A. J. Hozempa, Supervising Principal	I
Elizabeth-Forward Harry Faulk, Supervising Principal Elizabeth Waite, Reading Consultant	I
Freedom John Wahl, Supervising Principal	I
Luzerne Joseph D. Martin, Supervising Principal Merle Pope, Project Director	I
Northern Bedford B. F. VanHorn, Supervising Principal	I and II
Plum Boro B. N. DiPaolo, Supervising Principal	I
Reading Ralph C. Geigle, Superintendent Ausustos Monos, Project Director	I

State and School District	Phase of Participation
PENNA. (continued)	
Shippensburg Frank L. Coffey, Superintendent Jane Ferraris, Reading Coordinator	I and II
Wilkes-Barre Mary McAndrew, Reading Coordinator	II
WEST VIRGINIA	
Boone County Troy Floyd, Jr., Superintendent	I and II
Cabell County Robert Griffis, Title I Consultant Marjorie Leep, Reading Coordinator Paul Wassum, Title I Coordinator	I and II
Randolph County James B. Bruffey, Superintendent Donald Rice, Coordinator of Federal Projects	I and II

I. INTRODUCTION

Traditionally, Americans have been known for their sympathy toward unfortunates and for their good-natured willingness to help the underdog--the more so where children are involved. But while we have, as a nation, pitied physically or mentally handicapped children and recognized their disabilities as barriers to normal progress, we have been slow to acknowledge social, cultural, educational handicaps. Public Law 89-10, the Elementary and Secondary Education Act passed in April 1965, was and remains an attempt to recognize multiple types of disadvantage. A social-action measure, its intent is to help citizens overcome circumstances and environment which prevent them from entering the American social and economic mainstream.

Of the 1.3 billion dollars appropriated for the 1965 ESEA, over one billion dollars or approximately eighty percent was assigned to Title I, "Financial Assistance to Local Educational Agencies for Special Educational Programs in Areas Having High Concentrations of Children of Low-Income Families." These funds were distributed to individual state departments of education for assignment to local school districts. In order to receive allocations local education agencies were required to submit detailed program proposals for state education department approval. The ESEA places minimal restrictions upon the type of program eligible for support; local school personnel have been encouraged to be effectively innovative in formulating special opportunities for disadvantaged students.

Though Title I procedures provide for built-in evaluation of each local project, the ESEA is rightly concerned with statewide and regional impact. For this reason--and because local evaluation methods vary widely from program to program--neutral agencies across the country undertook broad areas of study in order to determine comparative effectiveness of particular projects and the total impact upon a special area. Such was the purpose of the research supported by Contract OE 6-99-162 and completed by a team of professors and research assistants in the College of Education, The Pennsylvania State University.

Phase I of the evaluation was conducted in eighteen local education agencies in Maryland, Pennsylvania and West Virginia. These projects began early in 1966 and concluded in June 1966.

Phase I, therefore, assessed short term programs active within the first six months of Title I implementation. Information gathered from these projects was reported in the research group's Interim Technical Report, October 1966.

Phase II of the evaluation included sixteen local educational agencies in Maryland, Ohio, Pennsylvania and West Virginia. Beginning in September 1966 and concluding in June 1967, programs evaluated during this phase were primarily school year length. Therefore, this report represents an assessment of the first full school year under Title I and is specifically concerned with the effectiveness of various projects upon the reading competence of elementary and secondary pupils in Northern Appalachia.

II. STATEMENT OF THE PROBLEM

The overall purpose of this evaluation is to determine whether Title I federally-supported local education programs are having significant impact upon the reading competencies of elementary and secondary school students in Northern Appalachia. The term "reading competencies" includes multiple factors which gave rise to a series of questions pertinent to this evaluation:

1. Were there significant differences in reading skills achievement between economically disadvantaged children who received Title I instruction and those who did not receive special instruction?

2. Were there significant differences between the reading progress of public and non-public school children who received Title I supported instruction?

3. What was the relationship between the socioeconomic structure of the school attendance areas and the reading progress of Title I children?

4. What was the relative effectiveness of specialized reading instruction for elementary and secondary students?

5. What were the relationships between the organization for instruction and reading achievement?

6. Was there a relationship between the classroom behavior of Title I teachers and the achievement of their students?

7. What were the reading attitudes of economically disadvantaged children? Was there a relationship between reading attitude and reading achievement?

It has long been established that children who come to school from impoverished home backgrounds where education is not held in high regard are not on an equal educational footing with children whose pre-school lives have been nourished with books, travel and parental enthusiasm for learning. Even though low family income cannot be equated with a low priority for education, the fact remains that children from low-income families rarely enjoy the advantages of the richer experiential background which can be provided by families with substantial earnings. This, in essence, is the basic assumption which led to the enactment of PL 89-10 and which also supports this study.

The selection of children's reading competencies as the prime concern of this project was justified by two major factors. First, the vast majority of local education agency proposals submitted to the various state departments of education were seeking support to improve reading and language facility for their children. Second, reading competence is basic to all school progress and lack of this competence has been identified as a significant deterent to academic success at both the elementary and secondary school levels.

III. METHODS AND PROCEDURES

The Study Sample

This report includes Title I Reading Programs in operation between September 1966 and June 1967. The subjects were 716 fourth-grade and 713 seventh-grade students in sixteen school districts located in Maryland, Ohio, Pennsylvania and West Virginia. The 1429 students were distributed as follows:

Grade Four		Grade Seven	
Public	Non-Public	Public	Non-Public
664	52	697	16

As each local educational agency received program approval from its state education department, it set about the task of identifying its Title I students needing special reading help. Cumulative guidance records, preliminary testing, and teacher conferences helped local Title I leaders identify project participants. Because so many districts in each state chose reading as a primary target, the PSU research team faced a mammoth task in selecting specific projects for study. For both Phase I and Phase II, a professor or a team of professors visited individual state education departments to read and analyze reading projects as quickly as they were approved by state officials. General information and specific data for the many projects that exhibited research potential were studied further by the research group in conferences at the university. To insure a varied sample, the research team considered geographical distribution, population density, economic and social milieu, difference in project organization and educational approach before deciding upon school districts appropriate to the study.

The districts finally chosen are situated in divergent environments ranging from sparsely populated rural areas of 1200 persons to a relatively large city of over 84,000 persons and are diffused throughout the Northern Appalachia area assigned for the study. Major income sources are day labor, agriculture, and industry. Organizational patterns for reading projects vary from individual remedial instruction to small group work to laboratory drill and self-pacing combinations. Instructional personnel vary from those with wide classroom experience (and self-preparation or workshop-preparation for a local district's specific Title I project) to those with recent undergraduate training but limited classroom experience (and minimal personal or local workshop preparation). Some districts using teacher-aides were purposely included in the study.

Finally, the research team included in its selection, projects which it considered to have high, moderate, and low potential and in this way avoided bias that could have resulted from concentration on programs exhibiting either promising or dubious chances of success.

National norms served as a comparison basis for the evaluation. A total of 105 Title I students were full-time parochial school children and provided a further comparative base.

Baseline and Terminal Data

Gates Reading Survey

Prior to or at the beginning of Title I instruction in the early months of the 1966-67 school year, all economically qualified children in the study sample were tested with the Gates Reading Survey to determine levels of competency in speed and accuracy, vocabulary, and comprehension. Testing was conducted in addition to any pretesting planned by local school districts in order to collect data from a single source, thereby obviating the need to transform scores from several sources.

At the conclusion of individual instructional programs, alternate forms of the Gates Reading Survey were administered to the students who had been pretested. Pre- and post-tests were conducted by the local educational agencies with tests provided and scored by the Penn State evaluation project.

Attitude Assessment

A child's attitude toward reading is a vital factor in his development of reading tastes and abilities. Of particular interest to the evaluation team was the nature of economically and educationally disadvantaged children's reading attitudes. Since no suitable attitude inventory existed for use with such children, the inventory, How I Feel About Reading, was developed by Dr. Myron Coulter and Dr. Robert Lathrop.

Observation and Interview Procedures

Throughout Phase II of the research project, visits were made to each local school district. With one exception, the project director participated in conferences with Title I officials in every local agency under study. In Maryland observation and interview visits were directed by Professor Lathrop; those in West Virginia were supervised by Professor Bliesmer; those in Ohio and Pennsylvania were administered by the project director. In every case initial on-site evaluations were made by the professor assigned to the individual state; then research assistants and professors participated in interim and final information gathering visits. Along with the usual classroom, lab or general project observation, researchers often conferred informally with students and teachers. Further, research assistants completed an on-site inventory of books, materials, facilities for every local project participating in the four state study in order to give the team as comprehensive a picture as possible of each local plan.

These procedures, followed throughout the course of each local project, enabled evaluation team members to compile information with which to assess the nature of instruction, the materials being used by remedial reading classes, and the prevailing socio-economic conditions of the communities. Later, these factors were utilized in arriving at an overall subjective evaluation of conditions and progress for the various local programs.

Taxonomy of Instruction and Materials

In order to provide a basis for comparing students' progress with the organization for instruction, each local program was classified by (a) the size of instructional groups and (b) the type of teacher provided. The following illustration represents the classification model.

Model I. Classification of Instruction

		TYPE OF TEACHER		
		Regular Classroom	Untrained Remedial	Trained Remedial
Group Size	Tutorial			
	Small Group (2 to 10)			
	Large Group (11 or more)			

In a similar manner the instructional materials used in the various programs were classified by type and use.

Model II. Classification of Instructional Materials

		TYPE	
		Independent	Systematic
USE	Self-Pacing		
	Directed-Pacing		

Independent - prescriptive materials used as the result of diagnosis. Supplementary to basal reading materials.

Systematic - basal reading materials, or others with a predetermined sequence of skill development.

Self-Pacing - instructional sequence determined by individual skill diagnosis.

Directed-Pacing - instructional sequence determined by manuals, skillbooks, textbooks; i.e., by materials rather than student diagnosis.

Analysis of Data

The original design of the study indicated a statistical analysis of the standardized test data using covariance technique. An inspection of the pre-posttest differences, however, indicated that no sophisticated analysis of the data was required. The data are reported below in tabular form showing means, differences, and frequency.

The Attitude Inventory results were studied by means of frequency distribution and mean scores by groups. The inventory was item analyzed to establish its reliability with economically disadvantaged students. These data are also reported below.

Finally, data were examined for differences among school attendance areas, grade levels, Title I and national norm scores, and public and non-public school subjects.

IV. RESULTS: DATA AND OBSERVATIONAL REPORTS

The Data

The Gates Reading Survey is designed to yield three subscores (Speed and Accuracy, Vocabulary, and Comprehension) which in turn may be combined into a fourth overall total score. The Gates manual provides nationally referenced norms for the three subtests and the project statistician has constructed speical norms of total test scores from the Title I students participating in this study.

The Reading Attitude Inventory, How I Feel About Reading, is designed to measure attitudes toward (a) reading in school, (b) reading outside school and (c) general reading interest areas. The instrument uses a simple agree-disagree format for the first sixty items; these are concerned with "feelings." The final section consists of a subject topic list from which the student is asked to select his reading interests. (See Appendix)

Characteristics of Participating School Districts

The sixteen school districts whose projects were evaluated within the Northern Appalachia areas of Maryland, Ohio, Pennsylvania and West Virginia were situated in divergent environments, rural, urban, or suburban in nature. Census density ranged from a sparsely populated rural area, 1,200 persons, to a County district of 110,000 including a relatively large city of approximately 84,000 persons. Many districts were situated in areas of dramatic population decline between the 1940 - 1960 census years.

Seven districts were located in rural areas where the chief employment sources were agriculture and day labor; six districts were in small towns (two of these centered in rural areas) where primary income sources included factory work as well as agriculture and day labor; the remaining two districts were situated in fairly industrialized cities of approximately 69,000 and 64,000 persons with income essentially from manufacturing and day labor.

In summary, the school districts in this study were typically located in rural areas and small towns (populations, 5,000 - 16,000) with income from agriculture and unskilled or semi-skilled day labor. Many families in all districts were receiving some form of welfare assistance to augment low incomes. Typically, unemployment was appreciable, three to six times national percentages. Within each school district studied, seven to sixty percent of the total number of families in residence qualified for Title I aid.

Comparison of Change in Reading Achievement Scores, Grade 4

Reading Speed and Accuracy, Grade 4

A comparison of the pretest-posttest change scores, class by class, indicates that median change for the 57 individual fourth grade classes studied was between three and three and one-half months, compared to national norm groups. Although modest when considered in absolute terms, the reader should bear in mind that the pretest achievement of many of these classes was below the normal fourth grade level. Taking only those classes whose initial reading level was "below grade" (less than 4.0) the median gain for 32 classes was seven months with 14 classes gaining nine or more months of reading speed and accuracy.

Somewhat unexpectedly a number of the classes, although presumably intended for disadvantaged readers, had pretest means at or above "grade level." There were, for example, six fourth grade classes who had pretest means of 5.0 or higher, indicating that before the study began these classes were reading at approximately the same rate of speed as the fifth grade students used in the national norming sample. Interestingly, three of these six classes had gains up to one year while the remaining classes had net losses in reading speed up to one year. Overall these six classes had a median gain of zero. Because changes of one or two answers could alter the grade level score by three to six months, little significance can be attached to changes (or lack thereof) of classes who started the study a year or more above expected grade level. Among classes beginning the school year substantially below grade level, mean changes of a year or more (in some cases more than two years) must be regarded as very encouraging.

Among the fourth grade classes who began the school year at or near the national grade level, the overall impression is that a few of the programs were extraordinarily successful in increasing reading speed and accuracy, producing mean gains of up to two and one-half years. Other classes starting out near the fourth grade norm actually regressed in speed and accuracy during the course of the study.

Vocabulary, Grade 4

For some reason, unexplained by the data, the fourth grade classes represented in this study were relatively close to the expected pretest norm of 4.0. Only nine classes had mean vocabulary scores more than one-half year below grade level. In each case the classes below grade level in vocabulary were also below grade in speed and accuracy.

Overall the median gain was approximately one-third of a year. Furthermore, the gains were relatively consistent across classes with 49 of the classes gaining one-half year or less and only eight classes gaining eight or more months. Among the classes showing the greatest gains in vocabulary many showed only modest gains in speed and accuracy. With a few exceptions gains in vocabulary seemed to bear little or no relationship to gains on Section I of the test.

Reading Comprehension, Grade 4

The reading comprehension score showed the least amount of change with 21 out of the 57 class means either remaining unchanged or indicating a net loss over the period of study. Another 20 class means indicated gains of up to one-half year. However, of the fourth grades studied only four revealed mean gains of as much as one grade level.

Total Score, Grade 4

The comparison of pretest-posttest changes for the overall total score is complicated by lack of national norms. The internal norms prepared from the study data indicate that there was a net increase in median posttest scores from 44 to 51. This seven point increase if uniformly distributed among the three subscores would represent a median growth of approximately three to four months of reading achievement. As has been pointed out, however, gains were highly variable from class to class with some groups showing gains of up to 20 points and other classes finishing the year with zero gains or even net losses.

In order to help interpret the gains in reading achievement made by particular classes, some attempt will be made to describe the characteristics of high and low change programs in terms of the observational data collected during the study.

Table 1

Pretest - Posttest Differences Mean (by class) for Grades Four Gates Reading Speed and Accuracy Scores

Mean Gain (or loss) by class		f
	Months	
	29-30	1
	27-28	1
	25-26	2
	23-24	
G	21-22	
A	19-20	2
I	17-18	3
N	15-16	3
	13-14	3
	11-12	4
	9-10	4
	7-8	5
	5-6	6 (MD)
	3-4	11
	1-2	5
	0	1
	1-2	2
L	3-4	1
O	5-6	1
S	7-8	1
S	9-10	-
	11-12	-
	13-14	1
		N=57

Table 2

Pretest - Posttest Differences (by class) Classified by Pretest Score

Gates Reading Speed and Accuracy, Grade Four

	Mean Score	f	Mean Gain (+) or Loss (-) In Months (Rounded)
	6.0	1	+3
	5.8	2	-8
	5.6	-	-
	5.4	1	+12
	5.2	1	+7
	5.0	1	-8
	4.8	2	+5
	4.6	2	+10
	4.4	2	+5
approx.	4.2	4	+10
expected	4.0	3	+9
norm	3.8	7	+3
	3.6	6	+15
	3.4	1	+5
	3.2	6	+8
	3.0	4	+11
	2.8	6	+12
	2.6	3	+7
	2.4	-	-

N=57

Table 3

Pretest - Posttest Differences Mean (by class) for Grade Four

Gates Vocabulary Scores

Mean Gain (or loss) by class		f
	Months	
	24	-
	22	-
	20	2
	18	1
G	16	-
A	14	3
I	12	2
N	10	-
	8	4
	6	10
	4	8 (MD)
	2	12
	0,1	8
	1,2	2
L	4	2
O	6	1
S	8	-
S	10	-
	12	-
		N=57

Table 4

Pretest - Posttest Differences (by class) Classified by Pretest Score

Gates Vocabulary Scores, Grade Four

Grade Level Pretest	f	Mean Gain (+) or Loss (-) In Months (Rounded)
5.8	-	-
5.6	1	+3
5.4	4	-1
5.2	1	+3
5.0	1	+5
4.8	6	+6
4.6	9	+2
4.4	3	+11
4.2	16	+4
4.0	1	+6
3.8	4	+9
3.6	2	+5
3.4	3	+7
3.2	4	+12
3.0	-	-
2.8	2	+7
		N=57

Table 5

Pretest - Posttest Differences Mean (by class) for Grades Four

Gates Comprehensive Scores

Mean Gain (or loss) by class		f
	Months	
	20	-
	18	1
G	16	-
A	14	-
I	12	3
N	10	-
	8	3
	6	11
	4	12 (MD)
	2	7
	0	6
L	2	8
O	4	3
S	6	2
S	8	1
	10	-
	12	-
		N=57

Table 6

Pretest - Posttest Differences (by class) Classified by Pretest Score

Gates Comprehensive, Grade Four

	Pretest Grade Level	f	Mean Gain (+) or Loss (-) In Months (Rounded)
	4.6+	6	+1
	4.4	1	+6
approx.	4.2	13	+2
expected	4.0	3	+5
norm	3.8	8	+1
	3.6	6	+1
	3.4	4	0
	3.2	10	+8
	3.0	3	-1
	2.8	1	+5
	2.6	2	+7
		N=57	

Comparison of Change in Reading Achievement Scores, Grade 7

Reading Speed and Accuracy, Grade 7

Median change for the 29 individual seventh grade classes studied was approximately 4 months compared to national norm groups. Increases in reading rate and accuracy of one year or more were recorded by 11 of the 29 classes. Several classes apparently had programs directed toward this particular dimension of reading skill since 8 of the 29 schools showed increased reading rates of more than two years. At the other end of the continuum, 9 classes showed no improvement in reading speed and accuracy and, in some cases, actual loss of a year or more. The remaining 12 classes recorded modest increases of two to six months.

Although the classes were chronologically picked from the seventh grade, pretest reading level for approximately half was around sixth grade. In 3 classes, reading level was two full grades below seventh grade. At the other extreme, 4 classes were a year or more above grade level when pretested.

Vocabulary, Grade 7

As a group, the 29 seventh grade classes showed no improvement in the Vocabulary subscore as a result of the reading program. A few individual cases reflected gains of a year or more while others lost a year or more. Most classes fell in a middle category showing little change in scores from pretest to posttest vocabulary levels. Classes that began their projects with students above grade level in vocabulary, almost without exception, showed decreased performance on posttests; classes that began below grade level, with minor exceptions managed improved posttest scores. The interpretation of the investigators is that little or no change was produced in vocabulary skill as this skill is reflected on the Gates Vocabulary section.

Comprehension, Grade 7

Very modest increases overall were found with the Comprehension subscores at the seventh grade level. The majority of gains were within the two to four months range; only 4 classes showed increases of eight or more months. As in Vocabulary, the Comprehension scores at the seventh grade level indicated slight regression for classes beginning projects with students above the average, slight increases for classes with students below the average. There is no evidence as reported in the Gates Comprehension subscore, that the seventh grade projects as a whole produced any increase in reading comprehension. At best, gains for individual classes were modest.

Total Score, Grade 7

One might expect from regression theory that students starting out substantially below grade level in general performance would tend to show the largest gains while those at or above grade level on the pretest would tend to show smaller gains. This would be expected if the experimental programs had little or no effect on reading levels or if differences in scores were statistical artifacts rather than true changes, gains or losses. However, from a pedagogical standpoint one might hypothesize that students who were initially low on the pretest would make the smaller gains; those initially reading well would continue in their above average performance. Neither pattern was clearly confirmed. While students who began programs after pretesting below average made impressive gains and others who began by pretesting above average regressed slightly, the largest gains tended to be made in classes beginning near the seventh grade level. This mixed result seems to the investigators to confirm what observation reports noted early in the study: certain programs at the seventh grade level were especially designed for the improvement of reading speed and accuracy. As indicated by other subscore data; however, changes in reading speed and accuracy bore little or no relationship to improvement in Vocabulary or Comprehension.

Table 7

Pretest - Posttest Differences Mean (by class) for Grade Seven Gates Reading Speed and Accuracy Scores

Mean Gain (or loss) by class	Months	f
	24+	8
	22	-
	20	-
	18	1
G	16	-
A	14	1
I	12	1
N	10	-
	8	-
	6	2
	4	5
	2	2
	0,1	3
	1,2	1
L	4	1
O	6	1
S	8	1
S	10	-
	12	1
	14	-
	16	-
	18	-
	20	1
		N=29

Table 8

Pretest - Posttest Differences (by class) Classified by Pretest Score

Gates Reading Speed and Accuracy, Grade Seven

	Grade Level Pretest	f	Mean Gain (+) or Loss (-)
	9.0+	1	+1
	8.8	-	-
	8.6	1	+38
	8.4	1	-12
	8.2	1	-19
	8.0	-	-
	7.8	-	-
	7.6	-	-
	7.4	2	+53
approx	7.2	1	-8
expected	7.0	1	+4
norms	6.8	1	+30
	6.6	2	+56
	6.4	5 (MD)	+1
	6.2	1	+2
	6.0	4	+5
	5.8	3	+17
	5.6	-	-
	5.4	2	0
	5.2	-	-
	5.0	-	-
	4.8	1	+12
	4.6	-	-
	4.4	1	+19
	4.2	1	+5
		N=29	

Table 9

Pretest - Posttest Differences Mean (by class) for Grade Seven Gates Vocabulary Scores

Mean Gain (or loss) by Class		f
	Months	
	24	-
	22	-
	20	1
	18	-
G	16	-
A	14	-
I	12	1
N	10	-
	8	-
	6	2
	4	3
	2	6
	0	5 (MD)
	2	4
L	4	2
O	6	2
S	8	1
S	10	-
	12	-
	14	2
		N=29

Table 10

Pretest - Posttest Differences (by class) Classified by Pretest Score

Gates Vocabulary, Grade Seven

	Grade Level Pretest	f	Mean Gain (+) or Loss (-) In Months (Rounded)
	9.2	1	-14
	9.0	-	-
	8.8	1	-2
	8.6	1	-6
	8.4	-	-
	8.2	-	-
	8.0	-	-
	7.8	1	-4
	7.6	1	-2
	7.4	1	+1
approx	7.2	1	-8
expected	7.0	2	+1
norm	6.8	3	+2
	6.6	2	-7
	6.4	3	+2
	6.2	2	+4
	6.0	4	+4
	5.8	1	+2
	5.6	5	+6
		N=29	

Table 11

Pretest - Posttest Differences Mean (by class) for Grade Seven Gates Comprehension Scores

Mean Gain (or loss) by class		f
	Months	
	20	-
	18	1
	16	-
G	14	-
A	12	1
I	10	-
N	8	2
	6	3
	4	4
	2	5
	0	-
	2	5
L	4	5
O	6	1
S	8	2
S	10	-
	12	-
		N=29

Table 12

Pretest - Posttest Differences (by class) Classified by Pretest Score

Gates Comprehension, Grade Seven

	Grade Level	f	Mean Gain (+) or Loss (-) In Months (Rounded)
	8.2	-	-
	8.0	1	-8
	7.8	-	-
	7.6	1	-1
	7.4	1	-1
approx	7.2	1	-3
expected	7.0	2	+8
norm	6.8	-	-
	6.6	1	+5
	6.4	2	0
	6.2	3	0
	6.0	3	+1
	5.8	2	+7
	5.6	5	+1
	5.4	3	+3
	5.2	1	+6
	5.0	3	0
		N=29	

Achievement of Public and Non-Public Students on Gates Reading Survey

Three of the sixteen projects studied during Phase II included one or more non-public school classes. These totaled eleven of the seventy-four individual schools and served 68 of the 1429 students under study. Thus, only a small number of the pupils in the study sample were full-time members of non-public schools.

Detailed comparison of scores achieved by public and non-public school students reflect small differences which are not considered statistically significant. Individually, these schools did reflect some differences of interest as will be indicated below and later in the observational reports section.

Two of the three districts working with non-public school youngsters included fourth grade pupils. In one district the public school students showed greater gains than the non-public students; in the other, non-public school pupils outgained public school pupils. In the one district where the non-public school students' performance was higher, District #15, three non-public schools were among the highest-gaining of all fourth grades in Speed and Accuracy. However, two of these schools were also among the lowest-gaining of all fourth grades in Reading Comprehension.

All three districts working with non-public school youngsters included seventh grade pupils. In District #15 - the same one which recorded the gains mentioned above - non-public school students showed greater gains than their public school counterparts. Again, this district recorded gains in three schools, two of them schools other than those indicated above as achieving high fourth grade gains. The seventh grade pattern further repeats the fourth grade in that these three non-public schools were among the highest-gaining of all seventh grades in Speed and Accuracy. Notably, however, one school was also among the highest-gaining schools in Reading Comprehension. The seventh grade pattern is further differentiated from the fourth grade in that two non-public schools from this same district registered among the lowest-gaining schools, one in Vocabulary and one in Reading Comprehension. Neither school was among those recording the high gains in Speed and Accuracy or Reading Comprehension mentioned above.

It is worth noting that in the one district which reported non-public schools outgaining public schools:

1. seven of the eleven schools participating in the evaluation study were non-public schools;

2. five of the seven non-public schools scored among the highest fourth or seventh grade achievement gains for all districts in the study;

3. highest gains were in the Speed and Accuracy subtest area though one school also scored well in Reading Comprehension;

4. two of the five schools listed above as showing substantial in Speed and Accuracy scored among the lowest districts in other subtest areas, one in Vocabulary and one in Reading Comprehension;

5. both schools referred to in 4. above were fourth grade sections.

Differences noted here will be examined further in the remainder of this section and in Section V, Observational Reports.

For the two districts in which public school students outgained their non-public school counterparts, the following should be noted:

1. one district included eleven schools in the research study, eight public and three non-public; the other district included seven schools, six public and one non-public;

2. except for one school in each district, all public schools in these two districts scored in the median-gaining areas;

3. both exceptions listed in 2. above were on the fourth grade level, one in Vocabulary and one in Reading Comprehension.

In summary, comparative scores in projects involving public and non-public school students yielded slight differences in the majority of cases. One interesting exception reveals a district which recorded sizable gains in Speed and Accuracy frequently accompanied by concommitant lower scores in Vocabulary and Reading Comprehension. Overall, the evaluation team does not consider differences between public and non-public student performance to be meaningfully significant.

Comparison of Population Area and Student Reading Achievement

Comparing pupil attendance area and pupil achievement reveals several interesting factors. The six districts attaining highest gains in the various subtest areas in fourth grade testing are comprised of two city, two town, and two rural districts. Among the highest gaining seventh grade districts are one city, two towns, and two rural areas.

The high gain fourth grade districts ranged from the lowest populated area in the study, (District #13), 1,200 inhabitants, to the two generally industrialized cities mentioned above. Almost the same was true for the seventh grade with the range encompassing identical extremes--from the smallest area in the study to one large city. Interestingly, the one city to record high gains in both fourth and seventh grade is also the district in which parochial school students generally outgained public school students within the study. The only other district (District #10) to record top gains at both fourth and seventh grade levels, it is worth noting, was one of the low population rural areas.

Among the four districts scoring the lowest gains in the various subtest areas at the fourth grade level are two towns and two cities. The six lowest scoring districts in the seventh grade include one city, four towns, and one rural area.

Fourth grade low-gaining districts ranged from small towns, 3,500 and 11,500 populations, to the same city which recorded high fourth and seventh grade subtest gains and a county district of 110,000 including an 84,000 inhabitant city. Again there were some close parallels at the seventh grade level. Here the lowest scoring districts ranged in population from the small town of 3,500 mentioned above to the same city whose non-public school subscores placed it among the highest gaining districts in both the fourth and seventh grades. Interestingly, as was noted in the earlier discussion of comparative public - non-public scores, this city district (#15) achieved high Speed and Accuracy scores in enough of its parochial school classes to place it among the highest of all districts in that subtest area. However, a few of these same classes also recorded low gains in Vocabulary or Comprehension.

Another notable factor arises with the recognition that town districts overwhelmingly dominate the lowest scoring seventh grade districts and comprise two of the four lowest in fourth grade. On the other hand, in fourth grade projects, no school organized on a consolidated rural district pattern was among the lowest scoring districts in any subtest area of the Gates Reading Survey. An attempt to account for this occurrence will be made in the Discussion section.

Relationship Between Geographic Distribution and Student Reading Achievement

Though selection of projects to be studied in each state reflects a representative geographic pattern, it is not possible to identify any one state's programs as clearly superior in terms of achievement gains. Indeed, the obvious and very desirable variety in planning and implementation of individual projects within a particular state mitigates against such conclusions.

All four states were proportionately well-represented among the highest achievement districts; no single state showed a disproportionate advantage over the others.

Comparison of Organizational Patterns and Reading Achievement

Within the sixteen districts in the study during Phase II, it was not possible to clearly determine common organizational designs. To designate any particular program as entirely small-group or large-group centered would be an injustice. All districts organized in small groups at one time or another but also individualized instruction within groups so that tutorial situations frequently resulted. As will be discussed later in this report, districts utilizing teacher-aides were especially effective in conducting group sessions and tutorials simultaneously.

Though no individual type of district organization--county plan, city district, or consolidated rural area--attained consistently higher gains in achievement, rural schools were conspicuously absent from low achieving groups. No rural district placed among the lowest fourth grades; one such district appeared among the lowest on the seventh grade level--on the Speed and Accuracy subscore only.

Elementary school organization for the fourth grade and junior or senior high school organization for the seventh grade did not seem to be an important factor since no striking differences in gains emerged. However, there did seem to be a tendency toward slightly larger groups for seventh grade instruction where a few districts operated with group sizes of eleven to fifteen. Indeed, one district utilized groups of twenty in its seventh grade sections and managed to score among the very highest Speed and Accuracy gains for all seventh grades. This district (#13) effectively combined a laboratory emphasis with its group work while using teacher-aides with commendable efficacy.

Comparison of Instructional Materials and Reading Achievement

All schools in the study had received or were receiving abundant and varied materials. These ranged from multiple levels of basal reading textbooks to the most elaborate programmed reading skillbooks and mechanical equipment.

From test data,guidance files and teacher records, and other available information, most projects employed a diagnostic basis for individualizing instruction. Then, usually, teachers chose materials to meet individual students' needs; often teachers personalized instruction by preparing their own materials for specific purposes.

Greatest gains in fourth grade achievement were recorded by districts using the eclectic approach described above. One district, #10, did use basal materials as a sequential part of its program; however, in totality its project featured a large measure of teacher prepared materials used very effectively in a non-sequential approach.

Similarly, top seventh grade districts used non-sequential materials selected after diagnostic testing. Among these projects district #10 used the same procedures it followed at the fourth grade level. One district, #13, combined non-sequential, highly individualized instruction with a strong reading laboratory program sometimes using sequential materials. Students in this district scored exceptionally high in Speed and Accuracy.

In summary, most districts used non-sequential materials in a manner prescribed by students' needs. Though some districts used basal texts, teaching manuals, and testbooks for skills instruction, learning sequences usually were based upon diagnostic information rather than rigid adherence to the sequence prescribed by a text. Two districts using sequential materials as a sizable part of their plans placed among the highest gaining projects. Since no single district in Phase II of the study relied primarily upon a sequential, directive program, no distinct comparative correlations between materials and achievement were noted.

Analysis of Attitude Inventory and Its Relationship to Gates Survey Scores

The inventory, How I Feel About Reading, was developed by the research team after no suitable published instrument for measuring attitude toward reading could be located. The instrument uses a simple agree-disagree format for the first 60 items; these are concerned with "feelings" about reading in school. The final section of the inventory consists of a list of subject topics about which the student is asked to indicate his reading interests. (See Appendix G)

Fourth Grade Analysis

Scores of the fourth grade students ranged from 5 to 55 with a pretest mean of 36.7 and a standard deviation of 8.6. The internal consistency reliability coefficient (K-R-20) for the first 60 items was .84 with a standard error of measurement of 3.4 points. The interpretation of this last statistic indicates we can be confident that if a parallel sampling of items were administered, two-thirds of the students would be predicted to have a score within 3 to 4 points of their original score on this test. Less formally, the inventory has sufficient precision that students with scores 5 to 6 points apart on this inventory may safely be assumed to have different attitudes toward reading.

As can be seen in Tables 13 and 14, eight of the classes showed mean gains of five or more points whereas only two classes showed losses of this magnitude. Although the median gain was only one to two points, individual classes showed gains up to twelve points, (District #7, school #6). Encouragingly, virtually all classes with below average pretest means increased during their Title I projects. Significant losses in attitude score occurred in only two Title I classes, (District #3, school 4 and District #5, school 6).

The fact that significant shifts in attitude were recorded in several classes suggests jointly that the inventory is capable of detecting such shifts when they occur and that under appropriate conditions reading attitude at the fourth grade level can be altered substantially. The reader should keep in mind that the data reported here represent class averages not scores of individual pupils where even more dramatic increases can be noted.

Table 13

Fourth Grade Pretest-Posttest Differences in Mean Attitude Inventory Scores, Classified by Pretest Score

Mean Pretest Score of Class	Frequency	Mean Gain (+) or Loss (-) Rounded
44	3	-2
43		+4
42	3	0
41	8	0
40	2	-1
39	2	+1
38	2	+3
37	5	0
36	6	0
35	1	+1
34	4	+4
33	4	+3
32	4	+3
31	1	+1
30	1	+2
29		
.		
.		
26	1	+12
.		
.		
23	1	-1
22	1	+7
	N=50	

Table 14

Class Mean Differences for Fourth Grade Classes Between
Pretest and Posttest Attitude Inventory Scores

Mean Gain or Loss by Class Points (Rounded)	Frequency
13	--
12	1
.	.
.	.
.	.
8	1
7	3
6	--
5	3
4	4
3	2
2	--11---Md
1	8
0	4
-1	2
-2	3
-3	4
-4	2
-5	1
-6	1
	N=50

Seventh Grade Analysis

As in the previous analysis, the scores covered a range of approximately 50 points with a mean of 37.2 and a standard deviation of 8.8. The internal consistency reliability of the seventh grade scores was .84 and this is highly encouraging for a first tryout of the reading attitude survey.

It can be noted in Tables 15 and 16 that only two classes made what may be regarded as major shifts in attitude as measured by this inventory, one (District #10, school 4) in the positive direction; one (District #10, school 2) in the negative direction. The remaining schools showed gains or losses which were within expected shifts due to instrument unreliability. In general, classes beginning their projects above the mean in attitude score tended to regress slightly--downward toward the mean. Classes initially below the overall mean regressed upward on the posttest. This would be the expected finding where no real shift in attitude had occurred.

The reader should bear in mind that the inventory used in this study does not presume to measure attitude toward school in general even though judged valid for assessing attitude toward reading. It should also be remembered that by the seventh grade many attitudes toward reading have become so solidified in children that any program for change must be considered as a long term project: positive results may not manifest themselves until some later date.

Table 15

Seventh Grade Pretest-Posttest Differences in Mean Attitude Inventory Scores, Classified by Pretest Scores

Mean Pretest Score of Class	Frequency	Mean Gain (+) or Loss (-) Rounded
45	1	-2
44	1	-2
43	1	0
42	-	
41	-	
40	-	
39	5	-5
38	3	+1
37	3	+1
36	2	0
35	3	+1
34	1	+2
33	1	+2
32	-	-
31	3	+1
30	-	
	N=24	

Table 16

Class Mean Differences for Seventh Grade Classes Between Pretest and Posttest Attitude Inventory Scores

	Mean Gain or Loss by Class Points (Rounded)	Frequency
	6	-
	5	1
GAIN	4	-
	3	4
	2	4
	1	1
	0	4 MD
	-1	1
LOSS	-2	6
	-3	2
	-4	-
	.	.
	.	.
	.	.
	-11	1
		N=24

Relationship of Attitude Data to Gates Survey Scores

A random sample of 90 4th grade students was drawn and a product moment correlation computed between the Gates Survey score and the attitude toward reading score (Items 1-60). A similar comparison was made of Gates scores and the number (breadth) of reading topics reported as interesting (Items 61-89).

The correlation between the Gates Survey score and the number of positive comments about reading in and away from school was not statistically significant ($r = -.06$). Combined with the reliability of the inventory (already described) this finding suggests that the instrument is measuring a dimension of attitude toward reading which is relatively independent of reading achievement.

Interestingly, the sample drawn suggests that there is a low negative relationship between reading achievement and the number of topics (breadth of interest) reported as interesting ($r = -.27$). The research team is not prepared to interpret this somewhat unexpected finding except to note that the relationship did vary from school to school and the low negative value may be the result of pooling data across widely differing schools.

Observational Reports

A significant part of the Phase II evaluation plan called for in-depth observation and interview visits to school districts participating in the study. As outlined in Section III, Methods and Procedures, the individual professors supervising research activities in each state completed initial and final--and in some cases interim--visits to a representational cross-section of the schools studied. Graduate assistants, specialists in reading, tests and measurements, and curriculum--all with experience in classroom teaching--examined and inventoried materials, checked facilities, noted instructional procedures and helped generally with observations and interviews during the tenure of each project. All research team members assisted in gathering economic, social, and educational data and information, then participated in conferences evaluating report material gathered from the four states cooperating in the study.

Seventy-four individual schools contributed test data for evaluation; observation and interview visits were made to forty-seven of these schools. Through a central office log, care was taken to insure that a representative sampling of schools would be visited: in each local district one-half to two-thirds of the total number of schools involved in the Title I Reading Projects under study were selected as observation/interview sites.

During many months spent visiting these Northern Appalachia schools, team members were constantly impressed by the overall commitment, concern, and cooperation evidenced in each district, in every state.

Consolidating information and data from forty-seven schools, in sixteen local districts, within four states has revealed the following profile of Title I Reading Programs in the study:

1. Pupils. The fourth and seventh grade students whom researchers observed in classrooms or reading laboratories and talked with in and out of class situations were often personable, usually helpful, always friendly. No small number, however, seemed somewhat forlorn, somewhat resigned to a less than successful school experience. In some pupils apathy signalled resignation; in others, restlessness betrayed hostile feelings born in an essentially alien environment.

   Particular school districts varied in their methods of choosing Title I students almost as much as they did in the character of their programs. Commonly, Title I project participants were chosen on bases of financial qualification--as determined by law--and deficiencies in reading skills. Primary sources of information upon which selection was based were:

   a. guidance or counselling records where such existed; administrator, social worker or teacher observation where guidance records were scant or nonexistent;

   b. administrator or teacher nomination on basis of school performance;

   c. recorded reading deficiency--one year or more behind grade level--though one district used six months below grade level as a guideline;

   d. diagnostic analysis through specific reading and intelligence testing prior to project initiation.

Informal conversations with pupils prior to or shortly after their beginning Title I projects frequently revealed limited experiential backgrounds. That normal, moderate, middle-class experiences with travel, movies, popular magazines, children's books, public libraries were not among the advantages enjoyed by many of these pupils was readily substantiated. As specialized Title I plans provided academic or cultural enrichment, perceivable changes in attitude and manner often occurred: in some notable instances, alteration of self-image resulted in amazing changes which transferred from Title I instruction to the regular classroom. See Appendices A and B.

Though Title I students attended special sessions usually necessitating their release from an assigned class, a study period, or an activities hour--one to five times per week--rarely did they appear to lose status. To the contrary, some gained prestige by leaving crowded or dreary classrooms for special treatment each day. If regular classes were held in a drab room, a one or two room rural structure, or in any school with limited facilities, the physical newness of Title I accommodations and materials transferred to a freshness of spirit and interest. Where special classes were conducted in an attached portable classroom, there was a distinct concommitant increase in a participant's stature among his peers.

Such excitement frequently permeated Title I projects almost from the moment of their inception. With contagious enthusiasm, teachers and pupils often reacted to a complex of forces in ways rendering personal changes in student behavior infinitely more meaningful than statistics can reveal.

2. Teachers. During Phase I teachers' verbalizations were rated on the Withall Social-Emotional Classroom Climax Index; and, as a group, Title I teachers proved to be overwhelmingly learner-centered. (see Interim Report, p. 13) Originally, it was anticipated that the more learner-supportive the teachers' statements, the greater would be students' reading skill progress. Without teacher-centered instructors in the sample, findings in this area were inconclusive during Phase I.

   Since Phase II included some Phase I teachers and since new Title I teachers were again strongly learner-supportive, the evaluators replaced formal Climate Index ratings with extended interview and observation sessions.

That so few teachers exhibited directive or teacher-centered tendencies is not surprising considering certain factors germane to recruiting and selection:

a. the vast majority of projects accepted teacher applications on a voluntary basis; no arbitrary assignments seem to have occurred;

b. every effort was exhausted to attract experienced teachers, preferably with reading preparation or remedial reading experience;

c. some administrators invited outstanding teachers to apply and thereby accept the challenge of new programs;

d. administrators drew upon young but, experienced teachers who had proven effective in the past but had retired from teaching to marry and raise a family.

Despite the considerable efforts of school administrators and individual Title I directors and the generally admirable response of teachers, effective recruiting remained a serious problem in many districts. (See the "Discussion" section of this report.)

The research team had the opportunity to observe and interview sixty-four teachers throughout Phase II of the study. All sixty-four were actively involved with one or more Title I classes. For classification purposes, each teacher was designated as:

a. a regular classroom instructor--non-degree or degree preparation for regular classroom teaching; limited or no workshop training in reading;

b. an untrained remedial reading instructor--non-degree or degree preparation plus remedial reading training and experience but no graduate training in reading;

c. a trained remedial reading instructor--degree preparation plus graduate training in reading.

Using this classification, the sixty-four teachers provided for Title I classes (those observed and interviewed for the study) exhibit the following preparation:

Table 17

Taxonomy of Teacher Preparation

Regular Classroom	Untrained Remedial	Trained Remedial
30	9	25

These teachers varied in experience from none to thirty-nine years with a considerable number over the ten-year mark. Formal preparation ranged from non-degree programs to Master's Degree plus thirty credits. Though many more trained remedial reading teachers were involved in Phase II than in Phase I, it is still obvious that more than half the Title I teachers were not formally trained to assume the positions they held. In part, many districts attempted to provide the additional training needed through reading workshops or specialized in-service sessions for potential Title I teachers.

Generally, the sixteen Title I projects examined in Phase II provided help for teachers through:

a. intensive two day to two week workshops prior to the projects' beginnings--with or without continuing in-service meetings;

b. periodic in-service training throughout the school year.

In either case, specialized help in teaching reading was usually offered by university consultants or qualified directors of reading programs from the local school district itself or a nearby system. A few districts augmented this instruction with sessions by child development, curriculum, or tests and measurements specialists.

As part of its in-service or workshop plan, a district utilizing teacher aides invariably provided special orientation sessions for them. Again, the scope and content of these programs varied greatly but generally followed the pattern of short intensive workshops reinforced with periodic meetings thereafter. Eight Title I projects of the sixteen in the study employed teacher aides.

3. Materials. An extensive listing gathered from inventories of all projects in the study appears in Appendices E and F. This compilation, assembled by research assistants during visits to each district, reflects a broad range in materials selection. Further, the list illustrates the basically traditional nature of such selections. One must, however, recognize how sparsely equipped were many Northern Appalachia Title I schools prior to federal aid for specialized instruction. Remedial help for some pupils in a number of these districts dates from the initiation of Title I projects; for others, these projects meant the first concerted effort to help was now possible.

   While the Interim Report recorded the Phase I initial tendency of many districts to emphasize acquiring books, machines, and other materials necessary for reading instruction, Phase II saw limited expenditures of this kind, and increased concentration on instruction.

   The relationship between achievement and materials will be cited later, but it seems appropriate to mention those teacher-devised materials commonly used. Appendix D catalogues "Some Teaching Practices Observed in Title I Classes in Maryland, Ohio, Pennsylvania, and West Virginia." Many teachers observed by the research team seemed particularly able to structure homemade materials for stimulating competition or motivating reading. Though this is commendable in itself and though researchers observed many effective uses of "reading caterpillars" (a new segment is added for each story read) or "automobile racetracks" (a car for each student records his progress in numbers of books read), by and large teachers did not manage innovative marriages of content and technique. Such ingenious plans as those of a teacher in district #6 (see Appendix D-5,last item), combining motivation, reinforcement, and reward in a multiple skill endeavor in which learning became an active process were all too rare. For the most part materials were commercially purchased and used in traditional and sometimes pedestrian ways.

4. Facilities. For at least seven of the sixteen districts studied in Phase II, providing classroom facilities for Title I projects became a difficult problem. Not only because some schools in particular sectors of a district were overcrowded, but also because so many Northern

Appalachia school districts have been without funds necessary to expand buildings or erect new ones, finding extra classrooms was sometimes impossible. Administrators and teachers showed commendable ingenuity in these situations. Title I classes or laboratory sessions were observed in an abandoned church, sectioned-off corners of classrooms, or cafeterias, school medical rooms, principals' offices, converted bookrooms, and refurbished basement rooms. In many cases these new quarters had been efficiently adapted to small group needs. However, a significant number of sites assigned for Title I instruction could not offer optimum conditions for the kinds of teaching planned and so sorely needed. A smaller number were inadequate enough to seriously inhibit effective instruction. Particularly disconcerting were cafeteria or sectioned-off accommodations where noise and bustle disturbed learners.

When rural districts with one or two room schools faced housing dilemmas, they sometimes turned to portable metal classrooms to add combination Title I Library and instruction facilities. In every instance, but notably in Districts #7, 10, and 13, these additions proved tremendously effective. Whether it was necessary to erect a portable classroom on a front lawn, in playground or parking lot--each of these was utilized by some district in the study--the attendant flexibility this extra space gave to each program was significant.

But curriculum flexibility is not the only advantage utilizing such structures seemed to offer. The psychological lift, the peer stature, given many Title I students by their association with new facilities has already been mentioned. However, it seemed to the researchers that the educational stimulus engendered in back country locations where "newness" is so rare--and hardly ever connected with a school building--sometimes encompassed the school community in its entirety. Where parents were caught up with Title I endeavors, as they certainly were in District #13, this stimulus appeared especially valuable.

A welcome and unpredicted factor in facility planning for a third of the districts studied was the degree in which school personnel worked to improve equipment or accommodations and to save money. When commercial equipment seemed exorbitantly priced, some schools turned to Industrial Arts students and teachers, to janitors and maintenance men. As a result homemade library or lab tables, bookcases, indeed an earphone and tape relay system were provided Title I projects at nominal cost. This, too, in its own way, nurtured an involvement with education in some places where there had been none before.

V. DISCUSSION

A cautionary word about the limitations of standardized testing: Achievement tests are, by their very nature, special occurrences which place considerable strain upon many students. Beyond this factor such mechanical variables as techniques used in administering tests or variables in pupils' willingness to guess rather than omit particular items complicate the most astute interpretations. Also, as Harold Bligh indicates, recent "empirical research suggests that further consideration be given to the differentiation of test norms" because norm scores do differ "with respect to sex or locale." (Review of Educational Research, February, 1965) It is not surprising, therefore, that the best tests devised do not have the capacity to assess all the qualities which make a good or poor reader.

Frequently, measurement psychologists are less prone to draw expansive inferences from the devices they develop than are teachers, administrators or laymen. One should doubly emphasize this point when considering experimental programs. Variables in student background and motivation, in teacher personality and emphasis, or in approach to the Title I reading program and to measurement itself demonstrate that no single factor can be responsible for achievement or change in achievement. Indeed, complexities involved in new programs--which often provide startlingly different environment, or result in an altered social-emotional classroom climate--deserve at least as much interpretation as do raw reading scores. When youngsters experience reading instruction in ways they never faced before, tremendous flux in aspiration and inspiration levels seems inevitable.

It should, then be quite apparent that the research team discredits the "all or nothing fallacy," the line of reasoning insisting that tests must tell the whole story or they tell nothing at all (see Henry S. Dyer, "The Possibility of Producing Useful Proficiency Tests in English," PMLA, May 1966). Rather, the Gates Reading Survey and the Reading Attitude Inventory provide important partial information; together they are useful barometers to aid assessment of the impact achieved through Title I reading projects. Observations of instruction, interviews with teachers, and common sense indicate that a considerable amount of the progress being made by Title I students was not reflected by achievement performances. Instances of growth in self-confidence, concept formation, independent reading and improved work-study skills were attributed directly to Title I instruction, yet were not specifically accounted for by achievement tests. It is not unlikely that the most valuable dividends occurring from a student's participation in a Title I reading program may be these cumulative gains in peripheral areas. Such latency in growth factors has been commonly recognized in experimental programs.

Characteristics of Title I Instruction

In any observational and interview report of this nature, inevitably various areas will intertwine. And so it has been with the researchers' reports on pupils, teachers, materials, and facilities found in the preceding section. In a sense all these reveal the general character of Title I instruction in schools observed within Northern Appalachia; therefore, the intent in this section is to offer both summary and specific observations. In this spirit the following seem most relevant:

a. School Districts used a variety of guidance and testing sources to identify those among their economically qualified pupils who needed special reading instruction.

b. Students tested, observed, interviewed for this study exhibited a distinct cultural and academic malnutrition.

c. The Title I projects observed provided facilities, materials, teachers and specialized instruction in locations where remedial reading help was limited or non-existent in the past.

d. Fewer than half the teachers involved in Title I instruction had received formal training in remedial reading as defined by the research group; however, various in-service programs attempted to aid Title I teachers.

e. Eight projects within the sixteen participating in the study utilized teacher aides who received orientation and instruction in varied degree.

f. The cumulative effects inherent in districts historically unable to replace old or outmoded school plants made finding adequate Title I space a serious problem. A wide spectrum of ingenious but sometimes inadequate arrangements evolved.

g. Generally, experiences with portable classrooms proved quite promising from physical, curricular, and morale viewpoints.

h. Most instruction observed was traditional by nature--phonovisual chart drills, reading aloud, vocabulary games. Though researchers encountered considerable curricular innovation, imaginative materials, not imaginative instructional techniques, seemed the rule.

i. A noticeable strength in four of the sixteen projects was the value wrought from well-planned and executed field trips. The trips enlarged students' experiential worlds; experiences were frequently reinforced in reading class.

As indicated earlier, Title I projects in the Northern Appalachia area faced serious and complex problems in staffing and in procuring adequate facilities.

School districts which have historically operated on minimal budgets cumulatively pyramid their deficiencies to a point where long range programs of aid are the only solution. Thus schools that have had to postpone adding new classrooms, expanding curriculum, creating libraries, hiring remedial personnel--and have had to postpone these improvements endlessly--too often have learned to accept doing without. No one expects much in the way of special help for slow students; few miss the chance to use a library that never existed. No one misses the smaller sized class since all classes have always held thirty-five or so; soon no one plans projects requiring conference rooms or reading labs--all this fades into plans for someday. But "somedays" fail to materialize.

Recruiting teachers, for many districts, proved to be the major barrier to getting Title I projects underway. In fact, some districts had program and facilities ready months before it was possible to procure an instructor. Obviously, where general conditions for teaching are not attractive, it is not going to be easy to hire teachers even when money is available as it had not been before. School districts located in isolated rural or mountain areas, those in significantly depressed areas, those with facilities sadly outmoded for many decades could not attract reading teachers simply because they had money enough to hire some for the first time.

When Title I teachers were lured from classrooms where they had performed admirably as regular teachers, Title I's gain was sometimes the regular curriculum's loss: it was not always possible to replace such teachers with efficient, certified personnel. In these instances, one could note considerable Title I achievement, but measuring the effect on regular instruction--if such measurement were possible--might modify the total picture.

Among those projects recording considerable gains, however, it is interesting to note that:

1. teachers were about evenly divided, in preparation for roles in remedial reading, among the trained and the untrained or regular classroom teachers;

2. workshop or in-service training for remedial reading instruction and Title I efforts favored a short pre-program orientation followed by long term, on-going in-service work--usually including bi-monthly meetings. A notable exception was District 13 where an extensive pre-project plan was linked to a comprehensive and meaningful on-going, in-service workshop series;

3. the adequacy or inadequacy of facilities or general program conditions seems to have affected teacher performance. For example, in a district where a teacher used regular classrooms for part of each week but hauled mechanical equipment and materials to rural schools offering minimal space and facilities during the rest of the week, a noticeable diminishing of achievement occurred.

While five of the nine districts recording the highest gains in various subscores utilized teacher aides, it should be recognized that a marked increase in using teacher aides occurred in Phase II as compared to Phase I. Further, the same schools scoring quite well in one or more subtest area often fell among the lowest scoring districts in another subtest section. Generally, where one or more areas, Speed and Accuracy or Vocabulary, for example, were emphasized the other area suffered. This result was obtained without seeming relevance to use of teacher aides or length of in-service preparation.

Since the ratio of teacher aides in the programs scoring among the highest achieving districts was directly proportionate to the number utilized in the entire project, the relationship between teacher aide programs and achievement could not be designated as markedly positive. It should be reported, however, that all districts claimed distinct advantages for teacher aide programs. Bases for such claims were founded in teacher morale, teacher-pupil contact hours, teacher planning time. To these obvious and desirable results, the research team would add one extension: when teacher aides assumed routine or mechanical chores for a teacher, the latter frequently was able to execute tutorial or small group instruction in a depth and frequency beyond that of projects where the teacher was responsible for all duties no matter how clerical. Time spent in secretarial chores is hardly time spent as a remedial reading instructor.

Beyond the foregoing, two items pertaining to general instruction deserve comment. These are family and community involvement and field trips as a learning experience.

At best only a few projects made more than cursory attempts to involve parents or community in Title I endeavors. Typically, community or family liason revolved about resource persons utilized as classroom visitors or consultants to faculty. Sometimes, field trips to historical or business sites brought Title I and community leaders together, but then parents were rarely involved except as chaperones.

The potential inherent in imaginatively planning for parental reinforcement is best illustrated by Districts 4 and 13. The former's "Saturday Clubs" used many parents as adult leaders (more than chaperones since parents were encouraged to share their childrens' experiences) and as instructors. Club groups, a regular Saturday part of Title I, encompassed historical-travel, art, music, physical education, and dancing. These experiences are precisely those culturally deprived children have not had at home. To offer them artistic, travel, sports opportunities--on a regular basis and in conjunction with adult and parental experience--seems to the evaluation team to engender interest and reinforcement in homes where there had traditionally been little. That teachers drew upon these experiences in remedial reading classes in order to expand vocabulary, stimulate reading experience, broaden general understanding was evident to research observers.

District 13 was extremely successful in bringing parents into rural Title I libraries. This success was achieved, in a gradual manner, by ingenious means. In order to get cultural materials into homes where resources were limited, District 13 established a lending library for art objects as part of its Title I reading library. Adjustable frames were provided for tastefully chosen reproductions; child or parent could select picture, match it to a frame, take it home on loan. Slowly, parents were encouraged to use the adult reading material in the Title I libraries--books and magazines--on the theory that such exposure, if extended to the home, would help classroom efforts through reinforcement. That the theory proved practical was evident to researchers through the high lending rate for art objects, a dramatic increase in parental patronage of libraries as the project grew older, the relatively high subscore achievement of this district, and--most importantly--an observable change in pupil morale and self-image.

When children whose existence has been unduly narrowed have the chance to see the world as so many middle-class youngsters view it every Sunday afternoon, active learning can replace passive resistance. Only a few Title I projects made outstanding use of field trip possibilities as a planned part of their programs. As defined by the researchers, outstanding field trips means those districts which selected the educationally viable experience over the convenient journey and regularly synthesized reading instruction with experiential background.

Among notable achievements beyond the Saturday Clubs mentioned above, District 12's trips to wild-life preserves, historical sites, cultural events--with close concommitant use of these experiences in class--seem relevant. This district's "controlled group-living" phase where students combined overnight trips to the forest with academic instruction appears to the evaluators to exemplify an innovative spirit all too rare in Title I planning.

VI. CONCLUSIONS AND IMPLICATIONS

Based upon the results of baseline and terminal reading achievement data, observation and interview reports, socio-economic conditions in school attendance areas, and student response to a reading attitude inventory, the following conclusions about Northern Appalachian Title I programs studied during Phase II are posited by the research team:

1. The general impact of Title I projects is considered to have been substantial for youngsters who have previously not been able to make "normal progress" in developing reading skills. If, by normal standards, these programs are still marginal, by previously existing conditions, they are a quantum step forward.

2. Many children making minimal progress--or slowly regressing when compared with normal progress of their peers--responded well to individualized help. A considerable number made discernible progress toward personal reading goals.

3. It is possible, given the appropriate emphasis in the program, to substantially improve the reading speed and accuracy of students who begin the program at average or near average levels. Attempts to improve reading speed of pupils who are initially low produce more modest results. Programs which do not emphasize speed and accuracy may actually show a net loss in this one dimension of reading skill when compared with normal grade-level progress. While speed and accuracy lend themselves to short range improvement, vocabulary and comprehension require long term projects where stages of exposure and reinforcement may be developed.

4. Though rural areas, small towns, and large cities all yielded school districts among the highest-gaining projects, the greater gains, statistically, were made in rural areas. Particularly at the seventh grade level, pupils in rural areas seemed more involved with their schools' projects. Perhaps rural living is less distracting to students this age than small town or city life is to their counterparts in these areas. No rural district placed among the lowest-gaining projects at the fourth grade level.

5. The majority of school districts in this study were making their first concerted attempt at remedial reading instruction as a result of Title I support. Expenditure emphasis in Phase II was upon instructional personnel and curricular improvement through in-service or consultant programs.

6. A significant number of projects--the greatest gaining schools among them--made overt progress in--

    a. altering demeaning social and economic stature of Title I pupils who had little status in regular classrooms;

    b. physically changing school environment with improved facilities and creative materials;

    c. individualizing instruction through small groups, tutorial help, or teacher aide assistance.

7. Over half the teachers employed in Title I programs as remedial reading specialists were not formally trained. The most successful projects provided initial and continuing in-service training for teachers and other personnel, especially teacher aides.

8. Title I projects were strong catalysts in bringing young teachers who had left the profession to raise families back into classroom service.

9. Inability to attract qualified teachers was the single most serious obstacle to setting up effective Title I projects in remote areas served by traditionally poorly-financed school districts. Inadequate facilities was the second most difficult problem.

10. Conventional teaching techniques with little attention to perfecting a union of innovative material and imaginative instruction was the rule rather than the exception in a majority of Title I projects.

11. Under appropriate conditions, reading attitude can be altered significantly at the fourth grade level. Individual pupils recorded some dramatic changes in attitude. Generally, as measured by the Attitude Inventory, seventh grade students' feelings about reading were more deeply set, much harder to alter than those of fourth grade pupils. This implies a serious need for a depth study of Title I programs aimed at the secondary school level.

12. No significant relationship appeared between the reading progress of public and non-public school children who received Title I supported instruction.

13. Outstanding use of field trips adapted to the goals of reading projects was realized by only a few school districts. The role played by broadened experiential backgrounds in relationship to language skills needs further exploration and study.

14. Though two projects achieved unusual success in gaining family and community involvement, attempts to plan such an outcome were rare. One of these projects was, statistically, among the highest gaining of all districts.

VII. RECOMMENDATIONS

In view of the experience of the Pennsylvania State University research team during this study, the following recommendations are offered:

1. that detailed studies be made of Title I programs realizing exceptional success with concurrent provision for disseminating their procedures to schools inexperienced in or realizing moderate success with Title I projects;

2. that overall financial aid to schools for use in programs for disadvantaged students be continued and expanded to enable programs to mature;

3. that continuity in the educational effort to help Title I students be insured through long-term (five and ten year) flexible planning so that poor districts can better attract professional personnel and better initiate meaningful programs without undue financial apprehension;

4. that extended studies of some pupils' post-Title I Project progress be executed;

5. that new and existing Title I programs be encouraged to plan for--

    a. more involvement of parents and communities;

    b. a wider and more relevant use of field trips in a general quest for more active learning opportunities for pupils;

    c. better and more extensive use of consultants in the context of on-going, in-service help for teachers and teacher-aides;

6. that a wholesale reappraisal of the special needs of Title I pupils who are at grade seven and above be undertaken with the express intent of helping them become functional readers in adult America's social and economic mainstream.

There can be no question but that the schools studied are not financially able to assist pupils with special reading problems; without economic support, many Northern Appalachia schools are almost totally lacking in the personnel, facilities, materials necessary to help those who fall behind. Indeed, some of these schools are hard-pressed to run an average program for "average" students. Ignoring disadvantaged children or curtailing programs underway merely places such students in situations where inadequate opportunity puts them continually further behind their peers. That considerable impact can be made by support of programs especially designed to aid these youngsters seems obvious from our study.

SUMMARY

TITLE: The Impact of P189-10 Title Activities on the Reading Competence of Elementary and Secondary School Learners.

PURPOSE: The overall purpose of this evaluation was to determine whether Title I federally-supported local education programs have had significant impact on the reading competencies of elementary and secondary school pupils in Northern Appalachia.

STUDY PROCEDURE: The research team chose to assess fourth and seventh grade reading programs for two major reasons: (1) most proposals submitted for State Education Department approval sought support to improve reading and language facility; (2) reading competence is basic to all school progress and its lack has been identified as a major deterrent to academic success at all grade levels. Study samples were taken from seventy-four different schools involving 1429 students in sixteen school districts within the Northern Appalachia area of Maryland, Ohio, Pennsylvania, and West Virginia. These districts were situated in divergent environments ranging from sparsely populated rural areas of 1,200 persons to a relatively large city of 84,000. Major income sources were day labor, agriculture, and industry. Typically, unemployment percentages were appreciable, three to six times national norms; many families were receiving welfare assistance. Within each school district studied, seven to sixty percent of the total number of families in residence qualified for Title I aid. Research procedure included a fourfold approach:

1. testing with Gates Reading Survey and a Reading Attitude Inventory (especially designed for this project) both before and after each project;
2. on-site classroom observation at varying stages during each project;
3. interviews with teachers, pupils, administrators at varied times during each project;
4. examination and cataloging of materials purchased for each project as well as techniques used in their classroom implementation.

This plan enabled our staff to chart pupil reading progress during the time span covered by each project in the study. Since the Gates Reading Survey scores Speed and Accuracy, Vocabulary, and Comprehension, it was possible to graph gain or loss on an individual and on a project basis in these three separate areas. Furthermore, the Attitude Inventory permitted recording of special changes in pupils' feelings about general (e.g., the amount of time spent in school on reading) and particular (e.g., history) reading areas. Sending professors and trained assistants into classrooms provided first-hand observational and interview data with which to correlate statistical change. In addition, collecting information about the teaching materials bought for each project and the ways these items were incorporated into the overall project plan resulted in a more comprehensive understanding of individual projects and of the total Title I impact upon reading classes.

The research team consisted of three Pennsylvania State University faculty curriculum specialists--in reading, measurement, and English; four graduate assistants--specialists in reading, tests and measurements, and curriculum--all with experience in classroom teaching. When needed, appropriately qualified reading, psychology, and sociology advisors functioned as support personnel.

FINDINGS: The study sample as a total group was not greatly deficient in comprehension ability or in vocabulary; however, the group was considerably behind its peers in basic skills, in speed and accuracy, in attitudes about reading, in ability and desire to articulate ideas. In seemingly similar reading programs, local educational agencies were actually aiming at widely divergent goals. For some, primary intent was to change self-image; others worked toward increased reading speed and accuracy or skill in phonetic identification. Principal findings indicated that:

1. Both fourth and seventh grades recorded total reading gains of approximately four months, after projects of varied length during the 1966-67 school year. Many schools and individuals recorded larger gains in various subtest areas.

2. The most dramatic gains were in the Speed and Accuracy subtest area.

3. No statistical significance was revealed in a comparison of scores for public and non-public school children.

4. With appropriate project emphasis, reading attitude can be altered significantly, at the fourth grade level. Seventh grade pupils attitudes about reading were difficult to change.

5. Most schools were desperately in need of the Title I assistance provided. For a majority with inadequate finances, facilities, and program, these Reading Projects represented a first concerted effort at individual remedial aid for their students.

6. Once federal funds were provided, attracting qualified teachers and finding adequate space were the primary difficulties encountered in setting up Title I programs.

7. Statistically, greatest reading gains were made by fourth grade classes in rural areas. No rural district placed among the lowest gaining projects at the fourth grade level.

8. Commendable progress was made by the majority of districts in individualizing instruction and altering demeaning social and academic stature of disadvantaged students.

9. Over half the teachers employed in Title I projects as remedial reading specialists were not formally trained for those positions. The most successful projects offered in-service training for Title I personnel. Teacher-aides were used by eight of the sixteen school districts studied. Generally, utilizing teacher-aides proved extremely effective.

10. Immediately after Title I funding, most school districts concentrated on purchasing materials; however, Phase II--school year 1966-67--saw strong emphasis on personnel and curriculum.

11. Though imaginative materials, developed commercially or by Title I teachers, were abundant, conventional teaching methods predominated. Instruction was rarely as creative as the situation demanded.

12. Two projects realized outstanding success at involving parents and community. Only a few school districts used field trips as effectively as they could have or related them closely to goals of reading programs.

CONCLUSIONS: Though modest when considered in absolute terms and compared with national norm groups, the general impact of Title I projects upon reading competencies is considered substantial for these youngsters who have previously not been able to make "normal" progress in developing reading skills. Further, it is concluded that:

1. in the majority of cases static conditions or outright regression was arrested as most projects made discernible progress toward individual reading goals;
2. many children making slow progress before entering a Title I program responded well to the individual help and accelerated in overall development;
3. a number of schools which were able to offer adequate reading programs for the first time (due to federal support) realized extraordinary success;
4. it is possible, given appropriate emphasis, to substantially improve reading speed and accuracy in relatively short term programs. Vocabulary and comprehension require long term exposure and reinforcement.
5. the greatest gains were made in rural areas and small towns with average to low general economy;
6. the greatest gains were recorded by school districts which--
    a. succeeded in altering demeaning social and economic environments;
    b. within a changed school environment offered new programs replete with efficient but innovative instruction;
    c. used small groups as an instructional unit (ten or fewer pupils) and met three to five times per week;

   d. provided initial and on-going training for teachers involved in Title I projects.

7. In a few instances individual projects were remarkably effective in involving pupils' families and in improving not only the student's self-image but that of his parents as well.

GENERAL INTERPRETATION AND IMPLICATIONS:

Unquestionably, the schools studied are not financially able to assist pupils with special reading problems; without economic support, many Northern Appalachia schools are almost totally lacking in the personnel, facilities, materials necessary to help those who fall behind. Indeed, some of these schools are hard-pressed to run an average program for "average" students. Ignoring disadvantaged children or curtailing programs underway merely places such students in situations where inadequate opportunity puts them continually further behind their peers. That considerable impact can be made by support of programs especially designed to aid these youngsters seems obvious from our study. In light of its findings, the Pennsylvania State University Title I research team recommends that:

1. detailed studies be made of successful Title I programs with provision for disseminating effective procedures to schools needing this information;

2. financial aid to schools for use in programs of compensatory education be continued and expanded to enable these programs to mature;

3. continuity in educational effort to help Title I pupils be insured through long-term--five and ten year--planning and budgeting;

4. extended studies of some pupils' post-Title I Project progress be undertaken;

5. new and existing Title I programs be encouraged to plan for parental and community involvement, using relevant field trips as active learning opportunities;

6. schools seek consultant aid in preparing ongoing, in-service programs for teachers and teacher-aides with the express purpose of demonstrating creative instructional techniques;

7. a complete analysis be attempted to ascertain special needs of Title I students, grade seven and above, with a distinct purpose of helping them become practical readers in an adult society.

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APPENDIX A

Local School District Case Studies of Title I Pupils

Reading Teacher

When he entered the reading laboratory in September, his permanent record file revealed the following information:

Grade Placement - Four
Chronological Age - 10 years
I.Q. Scores: Grade one - 149 Otis
Grade three - 94 Hennon-Nelson

All of his grades were very low, with every indication of severe reading problems.

The first test, the Metropolitan Reading test, placed him on grade level 2.2. On the Allen and Bacon oral test he tested pre-primer school level. Other diagnosis and informal inventories showed that he was practically a non-reader as far as oral reading was concerned. He did, however, though he knew very few words, seem to glean some comprehension from the printed page as shown by the Metropolitan test.

His I.Q., as measured by the Peabody Picture Vocabulary test, was 121. When given a listening story on tape, he would repeat the story to the teacher almost word for word. There was definite evidence of word blindness, functional in nature or dyslexic.

His only sensory defect was a severe speech problem that seemed to be one of the biggest reasons for reading problems.

There were no family problems of consequence. The father is employed as a construction worker and is at home during the winter months. There are three children, one older and one younger than T--. The older boy also has reading problems.

In a personal interview with his mother, the teacher found that, during his first year of school, he had shown no interest at all. He had developed no reading readiness; but was promoted to the second grade. He disliked his second grade teacher, so, made little progress. In the third grade, he just drifted. Thus, he entered the fourth grade as a non-reader.

His developmental history revealed that he had been rather slow in learning to walk and talk. As a toddler he was rather clumsy and showed evidence of poor muscular coordination.

At the present time he shows no evidence of physical or sensory problems except the immature speech. He is a very responsive and attractive child and usually "worms" his way into all hearts.

The teacher began instruction with T--- by reviewing the alphabet, which he knew very well; then she began basic phonics. This proved to be a lost cause. T--- was one of those children who are unable to get letter by letter sounding.

A different approach was tried. T--- had experienced so much trouble in trying to say the sounds as the teacher wanted them that he just wouldn't try any more.

Different things were tried until the teacher found that he would respond to what Dr. ___ describes as "whole word phonics." He could associate sounds of words, using key words and associating initial sounds.

He responded very well to a linguistic approach. By seeing the interrelationship among letters in single one-syllable words, he was able to get some word attack skills that were workable for him.

The reading teacher has been very fortunate, in this case, in having the full cooperation of the classroom teacher, who has worked with her in every way. Much invaluable aid was gained through the assistance and cooperation of a speech and hearing therapist.

Along with linguistics, T--- has been given controlled reader stories on a first grade level. He has gained much listening training and enrichment activities. He has read a library book (first grade level) about every day the last semester.

The SRA linguistic program and also the Sullivan program (B.R.) have been used. At the present time T--- is making excellent progress and is to be involved in a summer program.

Test results have shown the following progress:

September	2.2
February	2.6
May	3.3

The most rewarding thing to us is his change in attitude. He now loves to read and reads everything he can. To quote his mother:

> "T--- just loves to read now. This is the first year anyone has taken any interest in him. We are very happy with his progress."

R.B. entered the reading laboratory last September as a remedial student. Her permanent record file provided the following information:

Grade Placement	-	Six
Chronological Age	-	12 years - 9 months.
I.Q. Second Grade	-	123 Lorge Thorndyke
Fifth Grade	-	113 Hennon-Nelson

She was administered the Metropolitan Reading test. A diagnosis of reading difficulties was carried on through further testing and informal inventories. These indicated definite weakness in word attack skills. The test results showed her reading at grade level 3.5. She rated higher on word knowledge than comprehension since she had been able to memorize words. Her school reports indicated reading difficulties from the first grade on. There seemed to be a great need for reading readiness and motivation.

R. is a very attractive girl with no difficulties in special senses such as hearing, vision or speech. Developmental history gave no indication of birth injury. Her developmental sequences were all within average range. There was no medical history that seemed responsible. There were, however, some family problems that seemed to have some bearing on her emotional stability.

The parents are divorced with the mother having custody of the children. R. is the second child in a family of four. She is between two sisters who are high achievers in school. This very fact has given her a defeatist attitude. She has not been able to excell in school work or in games at home.

She entered school in September before her sixth birthday in December. For some reason, she disliked and feared her teacher; she cried every day and never really adjusted to the first grade. The second grade teacher, though ill-prepared, did seem to understand her and gave her love and understanding. She learned to like school; but, progressed very slowly because she had lost so much ground in the first grade that she could not keep up with her class. She was promoted to the third grade; then to the fourth. At this time, her mother realized that something must be done, so she asked the teacher to retain her in the fourth grade.

During this fourth year she experienced more emotional problems. Her mother and father separated and the family was subject to scandal. This usually has a way of reaching children in a very cruel way. Not only this, but she missed her father to whom she was quite devoted. These emotional upsets added to her frustrations so the repeated year of school was of little benefit.

In the fifth grade, she was placed in a departmentalized situation with half the day spent with an inexperienced, though progressive teacher; the other half with a very stern, conservative teacher who stuck constantly with a basal text approach with no language experience or free reading time. There was also constant friction between the two teachers that kept the children in a continual state of tension.

When R. entered the reading laboratory she was found to be quite resigned to her role as the "dullest one in the family." The teacher's first task was to convince her that she was not dull, but that she just had troubles that they, together, were going to correct.

Remedial activities began with the alphabet, then basic phonics. R. read orally and reviewed the Dolch basic words. She started on the second grade level in the SRA reading laboratory and was so thrilled with her successes that her personality seemed to change completely. She blossomed almost over night from a resigned failure to a hopeful, enthusiastic child. Her successes were giving her security that she had never had in school. The teacher let her move as rapidly as possible without meeting frustrations.

READING ACTIVITIES

R. used the controlled reader at least once a week to strengthen eye muscles and develop directional attack, always with increases in speed and comprehension. At the end of each instructional period, she had free reading time. R. liked to read the high-interest low-level books that were on the shelves in the laboratory.

She did cross-word puzzles built on synonyms and antonyms, analogous relationships, and contextual meanings to improve vocabulary.

Much time was spent in developing listening skills. Sometimes the listening was just for fun and enrichment; sometimes it was followed up with questions for measuring comprehension. Often tapes were made of the reading material so that she could read along with the teacher for reading expression. Choral reading was used by her group to increase oral expression.

In February, she was tested again. R's grade level had progressed to 4.5 - exactly one years growth in the semester.

The procedure for the remainder of the year was much the same. The teacher talked with her often to gain her confidence and give her the type work that would help her most. She enjoyed being able to help plan activities that gave her successes.

At the end of the fifth period she brought her report card for the teacher to see. They compared her progress between the first grading period and the fifth. Results were as follows:

First	period	Reading	D	Fifth	B
"	"	Language	D	"	B
"	"	Social S	D	"	C^+
"	"	Science	C	"	A-

The final test in May gave her a grade placement score of 5.7; thus a gain of 2 years - 2 months.

R. will be in the seventh grade next year and will still be a grade below her grade placement. She will continue to be assigned to the reading laboratory as a remedial student; but, should show a tremendous change in attitude. She has changed from a frustrated, nervous girl to a smiling more secure one who firmly believes that she can achieve her goals.

APPENDIX B

Student Records

M--- Junior High School

Name ______________________________ Year 1965 19 66
Last First Middle

Home Room No. 209 Credits ______

Pre-Title I Program

Year Beginning 1965	Seventh							Teacher's Signature
	1	2	3	4	5	Final	Credits	
Science	D	D	D	D	D	D		D--
Lib. Sci.	C	C						C--
Music			D	D				C--
Art					B	A		M--
Reading	C	C	C	C	C	C		D--
Phys. Ed.	B	D	F	F	F	F		S--
Geography	D	D	D	D	D	D		G--
Math	D	D	D	D	D	D		H--
English	D	D	D	D	D	D		L--
Physical Train.								
								Home Room Teacher J--
Times Tardy	0	0	0	0	0	0		
Times Absent	4	5	4	6	7	3		

M--- Junior High School

Name ______________________________ Year 1966 1967
Last First Middle

Home Room No. 204 Credits ______

Post-Title I Reg. Classroom

Year Beginning 1966	Eighth							Teacher's Signature
	1	2	3	4	5	Final	Credits	
History	C	C	C					S--
Reading	C	C	C					P--
W. Va. Hist.								R--
English	E	E	C					P--
Music	D	C	C					C--
Art								M--
Phys. Ed.	B	A	B					S--
Math	C	C	C					B--
Science	C	C	C					L--
Physical Train.								
								Home Room Teacher G--
Times Tardy								
Times Absent	0	1						

Reproduction of a Report Card Comparison

APPENDIX C

Sample Observational Reports

GENERAL INFORMATION:

Mr.___ (Principal) emphasized that Title I funds in ___ were spent mainly on personnel. A very comprehensive filmstrip concerning their Team-Teaching, Non-graded Program, was shown by the Principal.

This type of team teaching was done in individual classrooms. The planning, however, was team.

All classes were non-graded, but the decision to work with a team was voluntary.

SCHOOL --- __
TEACHER --- __ (a member of a team)
GRADE --- 4

Mrs.____ was part of a reading team. The children were on levels five-eleven (non-graded), or read on 2.5-5.5 reading levels. These children (third and fourth graders) were grouped on the basis of achievement tests and teacher evaluations.

Mrs.____ had three reading groups (according to ability). There were 7-15 children in a group. She had a directed reading lesson with each group daily. Each group was held for approximately thirty minutes.

Basal texts included Ginn, Scott Foresman, Allyn and Bacon, and Sheldon Readers.

Her teaching procedure usually included: board work (skills in phonics), comprehension after reading a story, i.e., the usual procedure suggested by the manual. Most of her work with the children is done in groups--the aide works with some children individually.

Mrs.____ also prepares charts, word cards, and worksheets for the reinforcement of certain skills. Vocabulary and dictionary skills are emphasized.

According to Mrs.____ dramatization, along with research and library skills have proven to be very effective. She also varies seat work according to their needs.

Since this was Friday, the class was working with their Weekly Readers. Mrs.____ had a directed reading lesson (using Weekly Readers) with individual groups, while the other children were working with dictionaries, or exercises in their Weekly Readers. Incidentally, the children did help in planning by suggesting questions which they wanted to know about particular articles.

Although ______ was pleasant and positive in her approach, many children were restless, and not actually involved in the lesson. The physical conditions were adequate.

All the teachers in this "team approach" had the same in-service meetings. These included two days of intensive study, with four or five other initial meetings, followed by weekly meetings. Provisions were made for planning periods at the same time for the teachers involved in the team approach so that they might share their ideas.

Mrs. ______ (a young teacher) has taught for several years. She received her B.S. and M.S. degrees in Elementary Education.

Note: The basal text used in this school system is Scott, Foresman.

School District ---, Elementary School ---

TEACHER --- Mrs. R.   Seventh Graders

This reading session was held in a portable classroom which also served as a library for this particular building. A teacher aide assisted Mrs. R. Mrs. R. had only been in remedial work since January, and was not aware of some of the questions asked about the program.

Her background included the following: A B.S. degree in Elementary Education--no graduate work, but she had taught third grade for seven years. Because this was Mrs. R's first year in remedial work, she had not had any in-service preparation prior to this appointment. She did mention the fact that one of her friends, who was a reading specialist, aided her from time to time.

Mrs. R. taught four groups each day for a period of thirty minutes. These children were grouped homogeneously as a result of their scores on the Nelson Reading Survey and an Individual Diagnostic Reading Test. A preference or interest survey, along with a questionnaire concerning the home environment, were also administered.

The children observed were seventh graders, reading on fourth grade level. There were ten children in the group, and the group method of instruction was used. At this particular session, one child was absent. The room was very attractive; the classroom climate was conducive to learning, and Mrs. R. related that the children were happy to come to the session. In fact, she said the children felt it was a privilege to be in this group.

The entire session was spent reading a play which had been previously read by the children. (Kitty Hawk) Only seven out of the ten children present participated, although the teacher informed me that the others had read previously. Mrs. R. suggested that the play be recorded, and the children seemed delighted at the prospect. The play was by no means dramatized, for the children were too bogged down with the reading. Furthermore, the recorder did not record effectively, because the children were too far away.

After the play, Mrs. R. spent the remainder of the period with constructive criticism and praise of their performance. Her manner was extremely pleasant and non-threatening. Her effort to elicit self-criticism was commendable, for it did indicate some attempt at teacher-pupil interaction.

Although Mrs. R. had previously implied that the older children enjoyed the class, she later contradicted this by saying that the younger children were more interesting to work with because of their enthusiasm.

The usual procedure used in the reading of a story was the following: Vocabulary introduced, silent reading, discussion. Mrs. R. felt that among the most effective devices or techniques used were: playing games, letting children work at the flannel board, using the tape recorder, flash cards, phonics workbooks, and book reviews. (Most of these techniques were used with the younger children)

Again, these children, although reading below grade level, read the regular reading text in the classroom. This text was Adventures in Reading by Harcourt and Brace. The text used in the remedial classroom was the Lippincott Basal Reading Series.

APPENDIX D

Some Teaching Practices Observed
In Title I Classes In Maryland,
Ohio, Pennsylvania, and
West Virginia

CHARTS AND DISPLAYS

Displays

A paper caterpillar with each segment representing a book the class has read--may be used as decoration

Make a "race track" with a block representing every ten books read

Build a mountain that represents spelling achievement

Create a bookworm display for library participation

A library display of books written by a native of the area becomes a highly motivating factor for these books relate to the children and their experiences

Charts

Children develop their own cards and small 10 by 10 posters of "letters that work together"

Make a chart featuring words the children are having trouble with. Include sentences using these words.

GAMES

Long Vowel Sounds Game

Long vowels are written on the board and the class is divided into two teams. Each team, in turn, is given a word orally by the teacher. If the word has a long vowel, the first team member writes it under the vowel which sounded in the word and that team gets one point. If the word does not have a long vowel sound, the team member declares it and this also gives the team a point. This continues until one team accumulates 10 points.

Variations of Bingo

The children write vocabulary words from their reading lessons on a card which resembles a Bingo card. Each day they play Bingo with these cards; thus, helping them to learn their vocabulary.

Adapt commercially prepared vocabulary Bingo games to the needs of your group. For example, play Bingo using contractions.

Play "Listen," using words, instead of Bingo using numbers, to enhance word discrimination.

Baseball Word Recognition

The class is divided into teams and vocabulary flash cards are used. Non-recognition is a strike (in the baseball game) and recognition is a hit.

Adapting Games to Fit Individual Needs

Purchase word games commercially but adapt them to the needs of your group, i.e. "rummy" using words that have long "i" sounds.

Guessing Game Using the Tape Recorder

Children's voices are taped, and the class then guesses whose voice they are hearing.

Crossword Puzzles for Vocabulary Enrichment

Crossword puzzles can be built on synonyms, antonyms, and analogous relationships; contextual meanings improve vocabulary.

Competitive Word Games

Teams are chosen. The teacher displays a vocabulary flash card and every child who can say the word remains standing. Those who do not know the word sit down. The team with the most children standing wins. This game may also be played with two pupils who aim to go as far around the room or table as possible.

Word Identification and Vowel Sounds

A picture card is used for word identification. After the word is properly identified, a child places it in a house representing the proper vowel sound. There is a different house drawn on the blackboard for every vowel sound.

Consonant Stepping Stones

Correct identification of consonants and their sounds enables children to be dismissed from class at the end of the period.

Phonovisual Technique

The phonovisual sound charts are used for this activity. Children are shown a picture, and they must pronounce the word it represents. After a word has been pronounced correctly, children choose consonants from a magnetic board representing the "sound" of this word.

Reinforcement of Consonant Sounds

Consonants and consonant blends, made from pipe-cleaners, are attached to the back of paper plates. Each child chooses a plate and must complete the sentence, "I could be a ________," using the consonant or blend he has chosen.

Each child pulls from a book a sheet of cardboard with a piece of string, cotton, flannel, etc., attached to it. He must identify the article and then drop it into a bag marked with the appropriate consonant. There should be a different bag for each consonant sound.

Clapping Game to Check Vowels

The teacher rapidly gives a list of words and the students are required to clap on those with a long vowel. Children who clap on the wrong word must sit down.

Initial Consonant Game

"I'm going to Pennsylvania and I'm going to take a p__?__." After each child supplies a word to fill the blank, change the initial consonant and start again.

"TH" Sound Game

Children are shown pictures which are to be identified. After this identification, the children state whether this word has a th element (either initial, medial, or terminal).

INDIVIDUAL RESPONSIBILITY PROJECTS

Progress Charts

Having each student keep his own progress chart develops responsibility while also providing motivation for improvement.

Independent Work

Post a schedule of activities the children are required to complete within a three week period. This encourages self-direction and allows the students to work independently at their own pace.

Using Students' Ideas for Reading Improvement

Complete a list of things that the children decide they need to do in order to improve their oral reading. Underneath each thing indicate an activity that will help them reach their goal.

Vocabulary Builder

Compilation of vocabulary words in notebooks can be done by the children. Vocabulary word games are effective for inspiring competition and encouraging students to learn more words.

Experience Stories for Vocabulary Building

Individual folders, entitled "MY WORD LIST," may be made to include vocabulary words taken from stories written by the class.

CHILDREN"S CREATIVE EXPRESSION

Chart to Encourage Creative Writing

A chart is entitled "Write a Story About. . . . ." Suggestions for stories include: My Earliest Memories; My Family; etc.

Creative Writing

The children can write poems about stories they have read. Also, they can write stories or poems about pictures that are placed on a chart.

Using Typewriters

Allow the children to use the typewriter to write short paragraphs. This provides motivation for them to write.

Field Trips

Field trips serve as a basis for extensive development of the children's oral and written vocabulary as they promote discussion and writing of experience stories.

Using Equipment to Encourage Students to Improve Their Reading and Recitation Ability

Let children use the tape recorder to tell and read stories, and then have them listen critically to their recordings.

Book Covers for Reviews

Book covers are designed by the children for booklets which include stories which are "First in Their Hearts. . . ."

Make Writing Interesting

The children tell or write a story which the teacher types on construction paper using a machine that has large type. The children then illustrate their own stories.

Individualized Story Books

Children create stories and compile their own books. These encourage the students to be creative and can be useful for reading practice.

PRACTICE STUDY SHEETS

Vocabulary Lessons Adapted to Individual Needs

Make an individual set of flash cards for each child of words he doesn't know. (These words can be obtained from the Dolch Sight Vocabulary List and from reading materials the children use.) Children take their cards home and study them; each day the teacher listens to them say their words individually. When a child can pronounce every word in his pack of cards he should be given a new set.

Class Drill for Practicing Eye-Spanning of Phrases

The teacher prepares a dittoed sheet that includes a paragraph of explanation about how we hear words in patterns--the patterns expressing the meaning and thought of the words. The students learn eye-spanning of phrases by practicing the "patterns of words" that are a part of the printed hand-out.

Exercises in an Inductive Approach to Reasoning

After reading a story, ideas which can be inferred from the actions in the story but which are not explicitly stated are presented. Students are to supply reasons to support the ideas. For example: Norman's bedroom was not on the first floor. From the story, ". . . ran upstairs to change into old clothes."

Reading Practice Sheets

The teacher compiles interesting personal experiences and accomplishments of her students (both in and out of school) and distributes the typed copies or places these stories (in large type) on the bulletin board for students to read aloud. The students enjoy reading their own accomplishments as part of the lesson.

MISCELLANEOUS

Teacher-made Books to Satisfy Individual Needs

To satisfy the varied interests of the children, a teacher may make books from old texts. This appeals to the individual reading interests of the children.

Predictive Outcome - Motivation for Reading

Before reading a story, the children formulate a possible outcome or ending which is based on a discussion of the story's title and the illustrations. Such endings are written and read orally. Later, the children read the story to find out who predicted the ending correctly.

Rock and Roll Music

Seventh grade children enjoy writing and reading the lyrics of Rock and Roll. Class lessons can be constructed around these lyrics.

Pen Pals are a motivation to write

Relating Materials to Home Experiences

When television is a source of common experience, use it as such. Find out what programs the children watch and utilize words and sentences from related newspaper and magazine articles in your lessons.

Illustrated Readings

Accompany poetry readings and other taped selections with transparency illustrations.

Oral Story Reading

For oral reading practice, assign children roles to be recited individually and collectively. As the story evolves, have them create a mural by pinning cut-outs appropriate to their parts to a bulletin board. These cut-outs should be made in class.

Utilization of Holidays as Unit Themes

The birthdays of Lincoln and Washington, for example, are used as a theme combining social studies and reading. When presented as a school assembly program, a patriotic pageant consisting of choral readings, marches and dances provides psychological impetus and is of educational value. Some properties and costumes for this can be constructed in class.

Purchasing candy and materials for Easter baskets provides an effective, real-life situation for solving arithmetic problems.

Debates Involving Research

These debates should be on current issues such as "Should a Woman be President?" Research to substantiate these arguments is required, and such sessions should always be taped.

Overhead Projector - Learning Consonant Blends

Using a transparency with pictures, have the children supply the consonant blend appropriate for each picture and write it under the picture. When the transparency is completed, the students can read the blends together.

Flash Cards for Learning Consonant Sounds

Words are written on flash cards with the consonant to be emphasized in a different color than the rest of the word.

Simulation Technique

Children "imagine" what a raccoon's life must be like. A paragraph is then read to negate or substantiate their beliefs. This paragraph should be prepared by the teacher.

Phonics and the Typewriter

Pictures are put on the keys which denote the sound of the letters. When children recognize the sounds, they can type the alphabet and use the typewriter. When a student succeeds in typing the whole alphabet correctly--using only these sound pictures, his paper is signed and displayed.

Vowel Lessons

Make cinnamon crisps with icing and on each one place an alpha bit to represent one of the vowels. When a child identifies the vowel, he may eat the cinnamon crisp.

Teacher's Helpers and Role-Playing

A puppet can be used to ask the children questions about what they have read since they may respond more readily to something like this than to a teacher. Also it can be used to help the children learn the alphabet and the sounds of the letters; as the students teach the sounds and letters to the puppet, they practice them.

Using Story Material for Creative Expression and Language Drill

After reading a story, each child may make his own kite and decorate it with a picture which represents a character from the story. Using the tail, compound words, divided correctly by the children, can be separated into their roots, each part of the word being placed on one side of the string. Around the back edges they can place words with a medial vowel that is made long if a final "e" is added. The teacher supplies these short-vowel words; the children make them into long-vowel words and put them on their kites. Words that sound like "kite" and a sentence using some of these words can be thought of by the student and written in the middle of the back of the kite. This project can be adapted to any lesson, using the areas of grammar that the children need to practice.

APPENDIX E

A Bibliography of Books and Materials Used by Some Title I Projects in Maryland, Ohio, Pennsylvania and West Virginia

REGULAR BASAL READING SERIES

- Allyn and Bacon
- American Book Company
- D. C. Heath and Company
- Ginn and Company
- Harper and Row
- Holt, Rinehart and Winston
- Houghton Mifflin
- J. P. Lippincott
- Lyons and Carnahan
- Macmillan
- Scott, Foresman
- Silver Burdett

SUPPLEMENTARY READING SERIES

Dolch Basic Book Series	Garrard Press
Dolch Basic Vocabulary Books	Garrard Press
Golden Rule Series	American Book Company
Literature Series	Harcourt, Brace and World
Open Highways	Scott, Foresman
Scholastic Literature Frontier Units	
Weekly Readers	

OTHER BASIC PROGRAMS (SYNTHETIC AND OTHER)

Initial Teaching Alphabet (ITA)	Pitman Publishing Company
Phonovisual Method	Phonovisual Products
Programmed Reading (Sullivan)	Webster Division, McGraw-Hill
The Sound Way to Easy Reading	Bremner-Davis
Speech to Print Phonics	Harcourt, Brace and World
Structural Reading	L. W. Singer Company, Inc.

PRACTICE MATERIALS

Building Reading Skills	McCormick-Mathers
Classroom Reading Clinic	Webster Division, McGraw-Hill
Conquests in Reading	Webster Division, McGraw-Hill
Design for Good Reading Series	Harcourt, Brace and World
Developmental Reading Text Workbook Series	Bobbs-Merrill
The Easy Way to Difficult Words	
Gates-Peardon Reading Exercises	Bureau of Publications, Teachers College Press, Columbia University
Listen-Hear Book Series	Follett Publishing Company
The Magic World of Dr. Spello	Webster Division, McGraw-Hill
McCall-Crabbs Standard Test Lessons in Reading	Bureau of Publications, Teachers College Press, Columbia University
New Practice Readers	Webster Division, McGraw-Hill
Phonics in a Nutshell	
Phonics Skilltexts	Charles E. Merrill Books
Phonics We Use	Lyons and Carnahan
Reading for Meaning Series	J. P. Lippincott
Reading Laboratory	Science Research Associates
Reading Skill Builders	Reader's Digest Services
Reading Skilltexts	Charles E. Merrill Books
Reading Spectrum of Skills	Macmillan
Reading Thinking Skills	Continental Press
Specific Skill Series	Barnell-Loft Ltd.
Tactics in Reading	Scott, Foresman
The Turner Livingston Reading Series	New York University Press

HIGH INTEREST LOW DIFFICULTY (HILD) MATERIALS

American Adventure Series	Harper and Row
American Reading Roundtable Series	American Book Company
Beginning to Read Series	Follett Publishing Company
Button Books	Benefic Press (Beckley-Cardy Co.)
Dan Frontier Book Series	Follett Publishing Company
Deep Sea Adventure Series	Harr Wagner Publishing Company
Folklore of the World Series	Garrard Press
How and Why Books	Charles E. Merrill Books
I Can Read Books	Harper and Row
Jim Forest Series	Harr Wagner Publishing Company
Peter and the Rocket Series	Benefic Press (Beckley-Cardy Co.)
Pilot Library	Science Research Associates, Inc.
Sailor Jack Series	Benefic Press (Beckley-Cardy Co.)
Teen Age Tales	D. C. Heath and Company
Torchbearer Library	Harper and Row

PICTURE AND OTHER DICTIONAIRES AND OTHER REFERENCE MATERIALS

Atlases	
Beginning Dictionary	Scott Foresman
Dictionary	Thorndike and Barnhart
Encyclopedia Britannica	Encyclopedia Britannica Educational Corporation
Jr. Dictionary	Scott, Foresman
My ABC Book	Ginn and Company
My Little Pictionary	Scott, Foresman

My Second Pictionary	Scott, Foresman
Webster's New Practical School Dictionary	Merriam Company

MISCELLANEOUS

American Education Series	Harper and Row
Classic Tales	Follett Publishing Company
Comprehensive Power Series	Educational Developmental Laboratories
Condensed Books	Reader's Digest Services, Inc.
Craig Reading Program (America Grows Series)	
A Dog Named Penny	Ginn and Company
Independent Word Perception	
Language for Daily Use Series	World Book Company
Learning Through Seeing	
Lts Classroom Reading Kit	
Reading Study Skills on American History	
Reading Study Skills on World History	
Tales of Jiminy Cricket	Walt Disney, Inc.
Teach Me to Read Series	Doubleday
Which Way Series	Rand McNally

MAGAZINES

Golden Magazine

Scholastic Scope

AIDS IN CHOOSING BOOKS FOR THE SLOW READER

Fare for the Reluctant Reader	Capitol City School Development Association
Gateways to Readable Books	H. W. Wilson Company
Good Reading for Poor Readers	Garrard Press
High Interest-Easy Reading for Junior and Senior High School Reluctant Readers	National Council of Teachers of English
High Interest-Low Vocabulary Reading Materials	Boston University
List of Books for Retarded Readers	National Council of Teachers of English
Reading List of High Interest-Low Vocabulary Books for Enriching Various Areas of the Curriculum	Reading Study Center, University of Connecticut

APPENDIX F

Audio-Visual Aids Used In Title I Classes In Maryland, Ohio, Pennsylvania, and West Virginia

A-V AIDS

Charts

Vowel Rules Chart	Allyn and Bacon, Inc.
The Sound Way to Easy Reading	Bremner-Davis
Building Pre-Reading Skills	Ginn and Company
Syllable Chart	Ginn and Company
Phonovisual Consonant Charts	Phonovisual Products, Inc.
Phonovisual Vowel Charts	Phonovisual Products, Inc.

Cards

Dolch 220 Basic Sight Vocabulary Word Cards	Garrard Press
Dolch Picture Word Cards	Garrard Press
Dolch Popper Words	Garrard Press
Sight Phrase Cards	Garrard Press
Ginn Basic Card Set	Ginn and Company
Flash Cards	Webster Division, McGraw-Hill
Basic Sight Words for Third Grade and Up	
Key Picture Cards	
Picture Cards for Pre-Primer and Primer	
Word Wheel	

Records

The Sound Way to Easy Reading	Bremner-Davis
Songs in Reading Readiness Program	Ginn and Company
Songs About Stories in the "Pre-Primer"	Ginn and Company
Songs About Stories in the "Little Red Hen"	Ginn and Company
Songs About Stories in "On Cherry Street"	Ginn and Company
Let's Listen	Harcourt, Brace and World
Listen and Do Records	Houghton Mifflin
Music Stories	The Jim Handy Organization
Instructional Sounds for Young Readers	
Phonics in a Nut Shell Record	
Record on Mark Twain	
Record on Mend Your Speech	
Record Sounds for Young Readers	
Walt Disney Records	

Games

Dolch Bingo Games	Garrard Press
Group Sounding Game	Garrard Press
Group Word Teaching Game	Garrard Press
Phonic Rummy	Kenworthy Educational Services,Inc.
Word Games	Milton Bradley Company
SRA Word Games	Science Research Associates

FILMS AND FILMSTRIPS

Captioned Filmstrips:	
"Words--Their Origin and Use"	
"School Skills for Today and Tomorrow"	
"Exploring Punctuation"	
"Use Your Library for Better Grades and Fun Too"	
"Parts of Speech"	
"The Sentence"	
"Steps in Building a Paragraph"	
Curriculum Filmstrips:	
Storybook Favorites, grades 1-3, set 1	
Stories to Read, grades 1-3, set 5	
Filmstrips for Controlled Reader	Educational Development Lab
Sounds We Use	Ginn and Company
Set I, Consonant Sounds	
Set II, Vowel Sounds	
Harcourt-Brace Reading Training Films, Levels I and II	Harcourt and Brace
Learning Through Seeing Filmstrip Kits for Primary, Intermediate, and Junior High	Learning Through Seeing Publishing Co.
LTS Junior High Tachist-o-film Kit	Learning Through Seeing Pub. Co.
LTS Senior High Tachist-o-film Kit	Learning Through Seeing Pub. Co.
Lyons and Carnahan Reading Training Films: grades 4, 5,6	Lyons and Carnahan
Psychotechnics Filmstrips for grades 4-7	Psychotechnics, Inc.
Society for Visual Education Filmstrips	Society for Visual Education
Music Stories	The Jim Handy Organization
It Happens in First Grade	

STORIES RECORDED ON TAPES

Billy and Blaze and the Poppy Seed Cake
Old Tales and New
The Princess' Slipper
The Three Billy Goats Gruff
Sleeping Beauty
The Wolf and Red Riding Hood

MECHANICAL AIDS AND OTHER EQUIPMENT

Tachistoscope

Tachomatic 500 Projector

Tachist-o-viewer (individual use)

Shadowscope

Controlled Reader

Language Master

Film Projector

Film Pre-Viewer

Filmstrip Projector with and without remote control

Filmstrip Pre-Viewer

Opaque Projector

Overhead Projector with transparencies, coloring pens and mounting framer

Projection Screen (portable type)

Projection Screen (wall type)

Projector Table

Record Player

Tape Recorder with Reels of tapes

Ear Phones

Reading Laboratory Student Stations (booths)

Typewriter with large type (Primary)

Portable chalkboard

Chart stand

Paper cutter

Thermo-Fax Secretary Copying Machine

APPENDIX G

Reading Attitude Inventory

HOW I FEEL ABOUT READING

Here are some statements about reading. Some of the statements were made by boys and girls who liked to read, and some were made by boys and girls who do not like reading.

We would like you to look at each statement and decide if you feel the same way about reading as the boy or girl who made the statement.

> If you do feel the same way, mark the A space for that statement on the answer sheet.
>
> If you do not feel the same way about reading as the person making the statement, mark the B space on the answer sheet.
>
> If you cannot decide how you feel about the statement, do not mark either A or B and go on to the next statement.

How I Feel About Reading in School

1. I wish we did not spend as much school time reading as we do.
2. I do not have enough time to get all the reading done that my teacher wants me to do.
3. I like to have the teacher call on me to read to the class.
4. I would rather do other kinds of work in school than reading.
5. I think I am a good reader.
6. I wish my teacher would let me read more than she or he does in school.
7. I need more time to read my work than other boys and girls in my class.
8. I am one of the better readers in my class.
9. I am one of the poorer readers in my class.
10. I read about as well as most other boys or girls in my class.
11. I don't think that reading is very important to me.
12. I wish my teacher didn't give us so much reading to do.
13. I do not find my school books very interesting.
14. I think reading helps me understand what the teacher tells us in class.
15. I can understand better when the teacher reads to me than when I read for myself.
16. I like to read to other people.
17. I like most of the stories in my reading book.
18. I like to learn new words in the stories I read.
19. I think it is fun to study how to sound the letters in words that I don't know.
20. I don't like to give the sounds in words because I don't know how.

21. I like to tell stories but I don't like to read them.

22. I don't get to read enough in my reading group.

23. I would rather work in a reading group than alone.

24. I would rather study how to read instead of reading so many stories.

25. I would like to have more help in learning how to read.

26. I like to read in my reader better than my history, science, or arithmetic books.

27. I would rather write stories than read them.

28. I don't like to write or read stories.

29. I can't remember what I read.

30. I like to read stories about fighting and boys and girls who are poor.

How I Feel About Reading Away From School

31. I don't like to read after I get home from school.

32. I like to tell my friends about things I have read.

33. I think I read more things at home than most of the boys and girls in my class.

34. I would like to receive a book for a birthday or Christmas present.

35. I wish we had more books and magazines for me to read at home.

36. I don't think my mother cares whether or not I read at home.

37. I never talk to my mother about reading.

38. I don't think I read as much out of school as most of my friends.

39. I don't have any books or magazines of my own.

40. Nobody in my family spends much time reading at home.

41. I would rather watch television than read.

42. I like to choose my own library books.

43. I do not like to go to the library.

44. Library books are too hard for me.

45. I would rather look at picture books than read story books.

46. I wish I belonged to a reading club.

47. I read a lot in the summer vacation.

48. I would sometimes rather read than play outside with my friends.

49. I don't like to read for fun.

50. I like to take books when I go on a visit away from home.

51. I can still like a book even if I don't know all the words in it.

52. If I don't know a word in a book I will ask someone in my family what it is.

53. I can understand most stories even if I don't know all the words.

54. If a book is hard for me to read I usually don't finish it.

55. I like to look through a book before I start to read it.

56. I choose most of my books by looking at the title and the cover.

57. I choose most of my books because a friend or teacher told me I would like them.

58. I don't care what a book is about, I will read it anyhow.

59. I get most of my books at drug stores or food stores.

60. I get most of my books from libraries or book stores.

Library

If our library books were put in sections according to the following topics, to which sections do you think you would go in selecting your books?

Mark the A space for the names of any topics you think would interest you. Mark B if you do not think you would like to read about the topic.

61. FAMOUS PEOPLE
62. HISTORY
63. HUNTING
64. FISHING
65. WAR
66. FUNNY STORIES
67. EXPLORING
68. SPACE TRAVEL
69. SPORTS
70. ANIMALS
71. DOCTORS-NURSES
72. ROMANCE
73. MOVIE STARS
74. CARS
75. AIRPLANES
76. BOATS
77. MUSIC
78. ART
79. OTHER COUNTRIES
80. COWBOY-INDIANS
81. MYSTERIES
82. CRIME
83. SEA STORIES
84. COMICS
85. CAMPING
86. LUMBERING
87. PEOPLE LIKE ME
88. SCIENCE
89. FAIRY TALES

APPENDIX H

The last word . . . some student comments

English

John

I like school this year because they have some new things such as the library and reading lab. The library is very nice and it is very easy to find a book. The reading lab is also very nice and I think it will help me a lot. I think they have really done a lot to the school since last year

English

What I like about school is the Read Laboratory because it help me to read more fastern and help me pronoun the word better.

Now that I'm in eight grade and will be Freshman next year I will had to work hard because in high school you work not play round like some of the grade school does. School is Almost the best place you Can go to learn to Read and write.